



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
17.03.2010 Bulletin 2010/11

(51) Int Cl.:
G09G 3/34^(2006.01)

(43) Date of publication A2:
01.04.2009 Bulletin 2009/14

(21) Application number: **08015642.5**

(22) Date of filing: **04.09.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(72) Inventors:
• **Takaku, Kohichi**
Tochigi 329-1233 (JP)
• **Ikeyama, Tetsuo**
Tochigi 329-2141 (JP)
• **Yagisawa, Hideto**
Tochigi 329-2141 (JP)

(30) Priority: **28.09.2007 JP 2007253684**

(71) Applicant: **Sharp Kabushiki Kaisha**
Osaka 545-8522 (JP)

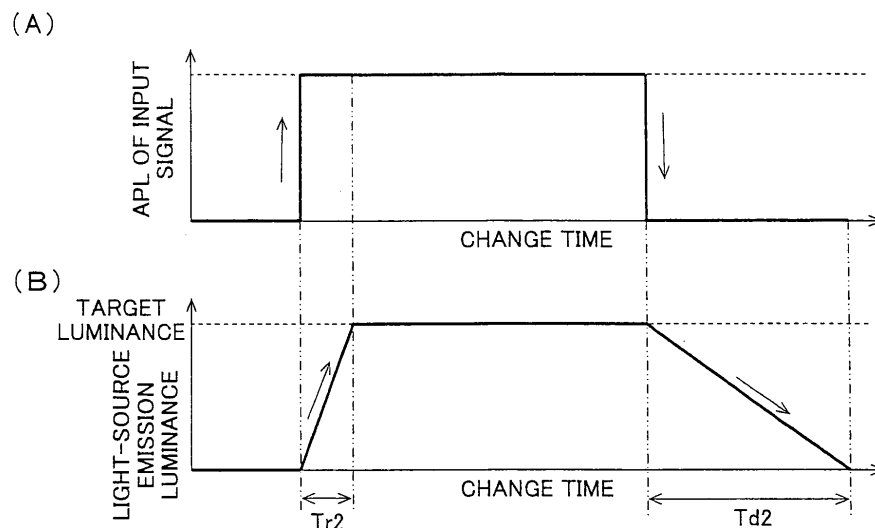
(74) Representative: **Müller - Hoffmann & Partner**
Patentanwälte
Innere Wiener Strasse 17
81667 München (DE)

(54) **Video displaying apparatus with dynamic brightness control of the backlight**

(57) A video displaying apparatus is provided that can change light-modulation rate of a backlight source in accordance with changes in a feature quantity of an input video signal based on a difference between times required for the light adaptation and the dark adaptation. A video displaying apparatus includes a liquid crystal panel (3) that displays an input video signal, a backlight source (9) that applies light to the liquid crystal panel (3),

an APL detecting part (6) that detects APL of the input video signal, and a control microcomputer (8) that variably controls a change amount of emission luminance of the backlight source (9) for each predetermined time based on the detected APL. The control microcomputer (8) performs control such that the change amount for the APL of the input video signal changing to a higher quantity becomes greater than the change amount for the APL of the input video signal changing to a lower quantity.

FIG.2





EUROPEAN SEARCH REPORT

Application Number
EP 08 01 5642

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	US 2003/201968 A1 (ITOH MOTOMITSU [JP] ET AL) 30 October 2003 (2003-10-30) * paragraphs [0065] - [0075], [0085] - [0130], [0179] - [0181], [0197] - [0200], [0204]; figures 1-4,7 *	1-3	INV. G09G3/34
X	WO 2005/022925 A (KONINKL PHILIPS ELECTRONICS NV [NL]; DE VAAN ADRIANUS J S M [NL]) 10 March 2005 (2005-03-10) * page 2, line 22 - page 6, line 25 * * page 7, line 10 - page 9, line 13; figure 1 *	1	
X	US 2002/021292 A1 (SAKASHITA YUKIHIKO [JP]) 21 February 2002 (2002-02-21) * paragraphs [0109] - [0145]; figures 8,9 *	1-3	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			G09G
Place of search		Date of completion of the search	Examiner
Munich		4 February 2010	Demin, Stefan
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			

2
EPO FORM 1503 03.82 (P04C01)

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

EP 08 01 5642

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.

04-02-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003201968 A1	30-10-2003	JP 2004004532 A	08-01-2004
WO 2005022925 A	10-03-2005	NONE	
US 2002021292 A1	21-02-2002	JP 2002031846 A	31-01-2002
		US 2006007219 A1	12-01-2006

专利名称(译)	具有背光动态亮度控制的视频显示装置		
公开(公告)号	EP2043079A3	公开(公告)日	2010-03-17
申请号	EP2008015642	申请日	2008-09-04
[标]申请(专利权)人(译)	夏普株式会社		
申请(专利权)人(译)	夏普株式会社		
当前申请(专利权)人(译)	夏普株式会社		
[标]发明人	TAKAKU KOHICHI IKEYAMA TETSUO YAGISAWA HIDETO		
发明人	TAKAKU, KOHICHI IKEYAMA, TETSUO YAGISAWA, HIDETO		
IPC分类号	G09G3/34		
CPC分类号	G09G3/3406 G09G2320/0626 G09G2320/0653 G09G2360/16		
优先权	2007253684 2007-09-28 JP		
其他公开文献	EP2043079A2		
外部链接	Espacenet		

摘要(译)

提供一种视频显示装置，其能够根据光适应和暗适应所需的时间之间的差异，根据输入视频信号的特征量的变化来改变背光源的光调制率。视频显示装置包括显示输入视频信号的液晶面板（3），向液晶面板（3）施加光的背光源（9），检测输入的APL的APL检测部分（6）视频信号和控制微计算机（8）基于检测到的APL在每个预定时间内可变地控制背光源（9）的发光亮度的变化量。控制微计算机（8）进行控制，使得输入视频信号的APL的变化量变为较高的量变得大于输入视频信号的APL的变化量变为较低的量。

FIG.2

