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(54) **Method and device for processing video data for display on a display device**

(57) In order to improve the picture quality of plasma display panels and to reduce differences to present CRTs dithering is used. However, the dithering pattern may appear on the retina for some movement having a spatio-temporal period similar to those from dithering. There-

fore, it is proposed to use motion vectors coming from a motion estimator (14) in order to suppress the visibility of the dithering in case of motion. Then, for the viewer the quality of moving pictures will be similar to those obtained for static pictures.

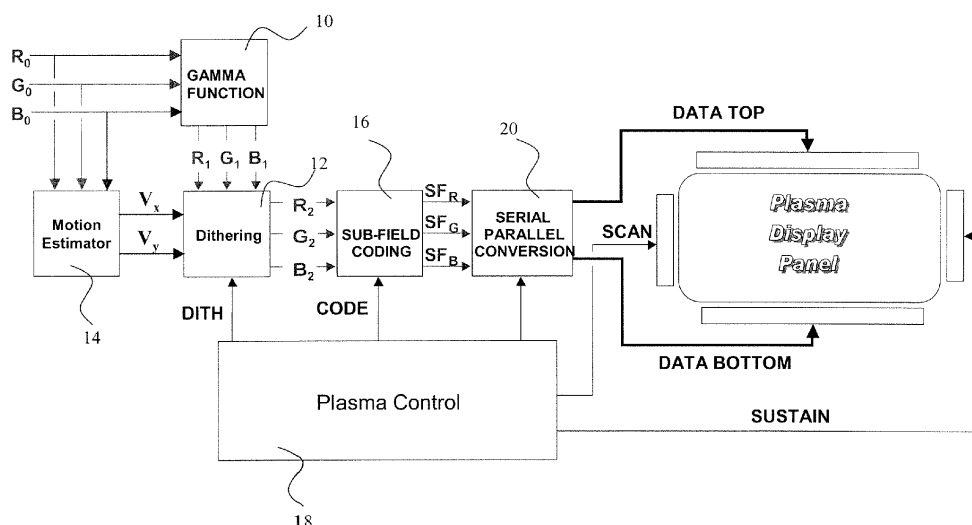


Fig. 3



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EUROPEAN SEARCH REPORT

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EP 03 10 2129

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	EP 0 656 616 A (TEXAS INSTRUMENTS INC) 7 June 1995 (1995-06-07)	1,2,4,6, 9,11,12, 15,16	INV. G09G3/28 G09G3/20
A	* abstract * * page 2, line 27 - line 30 * * page 3, line 3 - line 32 * * page 4, line 13 - line 24 * * page 5, line 33 - page 6, line 18; figures 1-10 *	3,5,7,8, 10,13,14	
Y	WO 91/10324 A (MASSACHUSETTS INST TECHNOLOGY) 11 July 1991 (1991-07-11)	1,2,4,6, 9,11,12, 15,16	
A	* abstract * * page 12, line 1 - line 20 * * page 13, line 1 - line 13 * * page 19, line 1 - line 12 * * page 32, line 1 - line 15; figures 1-11 *	3,5,7,8, 10,13,14	
Y	BECK DEPARTMENT OF ELECTRICAL ENGINEERING D R ET AL: "Motion Dithering for Increasing Perceived Image Quality for Low-Resolution Displays" SID INTERNATIONAL SYMPOSIUM. DIGEST OF TECHNICAL PAPERS., vol. 29, 13 July 1998 (1998-07-13), pages 407-410, XP007008628 Santa Anaheim, CA, USA * the whole document *	1,2,4,6, 9,11,12, 15,16	G09G H04N
A	US 6 288 698 B1 (ISHII TAKATOSHI ET AL) 11 September 2001 (2001-09-11) * abstract * * column 1, line 34 - line 60 * * column 5, line 39 - line 62; figure 3 *	1,8	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 June 2007	Examiner Gundlach, Harald
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	

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Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 10 2129

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,D	EP 1 136 974 A (THOMSON BRANDT GMBH) 26 September 2001 (2001-09-26) * the whole document * -----	1-16	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 June 2007	Examiner Gundlach, Harald
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			

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EPC FORM 1503 03/82 (P04C01)

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

EP 03 10 2129

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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05-06-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0656616	A	07-06-1995	CA 2137061 A1	03-06-1995
			CN 1119808 A	03-04-1996
			JP 7231416 A	29-08-1995

WO 9110324	A	11-07-1991	AU 650256 B2	16-06-1994
			AU 7166491 A	24-07-1991
			CA 2048623 A1	29-06-1991
			EP 0462261 A1	27-12-1991
			JP 4505537 T	24-09-1992
			WO 9110328 A1	11-07-1991

US 6288698	B1	11-09-2001	NONE	

EP 1136974	A	26-09-2001	AU 3928301 A	03-10-2001
			CN 1462423 A	17-12-2003
			CN 1870108 A	29-11-2006
			WO 0171702 A2	27-09-2001
			JP 2003528517 T	24-09-2003
			TW 564387 B	01-12-2003
			US 2003103059 A1	05-06-2003
