



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁵ : G02F 1/00, G09F 9/30</p>	A3	<p>(11) International Publication Number: WO 92/02846 (43) International Publication Date: 20 February 1992 (20.02.92)</p>
<p>(21) International Application Number: PCT/US91/05601 (22) International Filing Date: 7 August 1991 (07.08.91) (30) Priority data: 565,481 10 August 1990 (10.08.90) US (60) Parent Application or Grant (63) Related by Continuation US 565,481 (CON) Filed on 10 August 1990 (10.08.90) (72) Inventor: and (75) Inventor/Applicant (for US only) : SELBREDE, Martin, G. [US/US]; 3046 Blondell Place, Thousand Oaks, CA 91320 (US). (74) Agent: GRIFFITH, James, H.; 2674 E. Main Street, Suite C-230, Ventura, CA 93003 (US).</p>	<p>(81) Designated States: AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH (European patent), CI (OAPI patent), CM (OAPI patent), DE (European patent), DK (European patent), ES (European patent), FI, FR (European patent), GA (OAPI patent), GB (European patent), GN (OAPI patent), GR (European patent), HU, IT (European patent), JP, KP, KR, LK, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI patent), MW, NL (European patent), NO, RO, SD, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US. Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 19 March 1992 (19.03.92)</p>	
<p>(54) Title: OPTICAL DISPLAY</p> <div style="text-align: center;"> </div> <p>(57) Abstract</p> <p>An optical display in which at least one pixel is selectively controlled to shutter light out of a light guidance substrate by violating the light guidance conditions of the medium, and in which a full color palette is provided by multiplexing the three additive primaries in relation to the inherent limitations of the human eye.</p>		

+ DESIGNATIONS OF "SU"

Any designation of "SU" has effect in the Russian Federation. It is not yet known whether any such designation has effect in other States of the former Soviet Union.

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INTERNATIONAL SEARCH REPORT

International Application No PCT/US 91/05601

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶				
According to International Patent Classification (IPC) or to both National Classification and IPC				
IPC5: G 02 F 1/00, G 09 F 9/30				
II. FIELDS SEARCHED				
Minimum Documentation Searched ⁷				
Classification System	Classification Symbols			
IPC5	G 02 F; G 09 F			
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in Fields Searched ⁸				
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹				
Category *	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³		
X A	US, A, 4343536 (TAKAYA WATANABE ET AL) 10 August 1982, see column 2, line 38 - column 3, line 7; abstract --	1 2-11		
X A	EP, A2, 0219069 (FUJI PHOTO FILM CO. LIMITED) 22 April 1987, see column 7, line 46 - column 8, line 44; abstract --	1 2-11		
X A	EP, A1, 0278038 (BATTELLE MEMORIAL INSTITUTE) 17 August 1988, see column 12, line 31 - line 55; abstract; figure 10	1, 12, 17, 30, 42 2-11, 13- 16, 18- 26, 31- 34, 43- 50		
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<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>* Special categories of cited documents:¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 50%; vertical-align: top;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"Z" document member of the same patent family</p> </td> </tr> </table>			<p>* Special categories of cited documents:¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"Z" document member of the same patent family</p>
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IV. CERTIFICATION				
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report			
17th January 1992	0 6. 02 92			
International Searching Authority	Signature of Authorized Officer			
EUROPEAN PATENT OFFICE	Nicole De Bie			

**ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO. PCT/US 91/05601**

SA 52595

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 31/10/91. The European Patent office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4343536	10/08/82	EP-A-B- 0019278	26/11/80
		JP-A- 56106224	24/08/81
		JP-A- 56120262	21/09/81
		JP-A- 56120263	21/09/81
		JP-C- 1454753	25/08/88
		JP-A- 56120028	21/09/81
		JP-B- 62062006	24/12/87
		JP-A- 55151624	26/11/80
		JP-C- 1591162	30/11/90
		JP-B- 2013769	05/04/90
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		EP-A2- 0219069	22/04/87
US-A- 4830448	16/05/89		
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JP-A- 62089936	24/04/87		
US-A- 4758062	19/07/88		
EP-A1- 0278038	17/08/88	NONE	

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