[54] **SPATIAL LIGHT MODULATOR SYSTEM**

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[21] Appl. No.: **980,121**

[22] Filed: **Nov. 23, 1992**

Related U.S. Application Data

[63] Continuation of Ser. No. 681,938, Apr. 8, 1991, abandoned.

[30] **Foreign Application Priority Data**

Apr. 9, 1990 [JP] Japan 2-93524
Jun. 19, 1990 [JP] Japan 2-160797

[51] Int. Cl.^{5} G02F 1/03; G02F 1/1347; G02F 1/135; G03B 21/14
[52] U.S. Cl. 359/53; 359/72; 359/250; 359/256; 359/259
[58] Field of Search 350/173, 342; 353/20, 353/31, 33, 34; 359/71, 72, 247, 634, 637, 638, 64, 53, 294, 250, 256, 259

[56] **References Cited**

U.S. PATENT DOCUMENTS

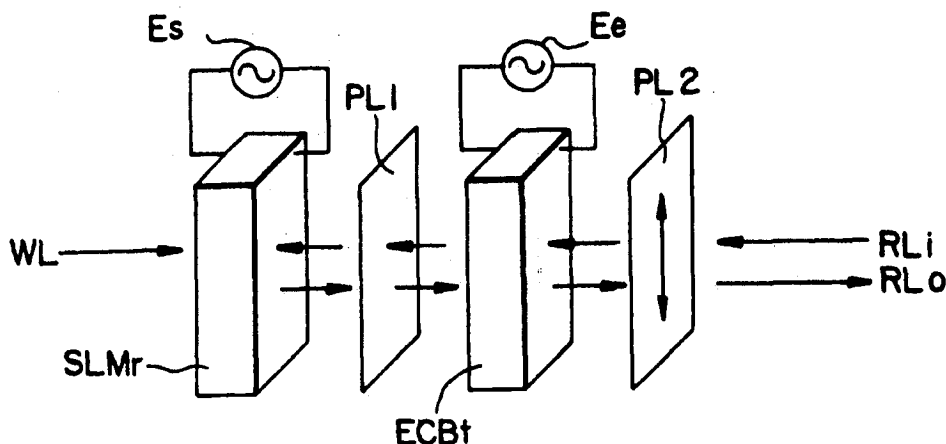|			
1,319,292	10/1919	Kunz	350/173
1,897,874	2/1933	Tuttle et al.	350/173
2,096,425	10/1937	Dixon et al.	350/173
2,737,076	3/1956	Rock, Jr.	350/173
2,971,051	2/1961	Back	350/173
3,333,053	7/1967	Back	350/173
4,191,456	3/1980	Hong et al.	350/242
4,416,514	11/1983	Plummer	359/64
4,423,927	1/1984	Bly	359/72
4,461,542	7/1984	Gagnon	350/342
4,541,691	9/1985	Bozak	359/64
4,650,286	3/1987	Koda et al.	350/342
4,770,500	9/1988	Kalmanash et al.	359/64
4,867,536	9/1989	Pidsosny et al.	359/64
4,933,751	6/1990	Shinonaga et al.	350/173
4,968,120	11/1990	Depp et al.	359/64
4,981,352	1/1991	Tejima et al.	350/173
5,039,209	8/1991	Takanashi et al.	359/72
5,054,892	10/1991	Takanashi et al.	359/72
5,130,826	7/1992	Takanashi et al.	359/72

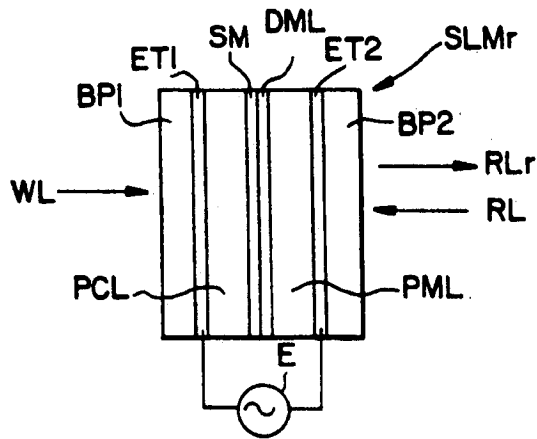#### FOREIGN PATENT DOCUMENTS

63113304 1/1990 Japan .

[57] **ABSTRACT**

There is provided an optical system for a spatial light modulator. The system comprises a light source for emitting an unpolarized light, a separator for separating a first linearly polarized light having a specified plane of polarization from the unpolarized light and polarizer for rotating the plane of polarization of the first linearly polarized light at a specified angle different from the specified angle to obtain a second linearly polarized light, wherein the second linearly polarized light is adopted as a reading light. Also provided is a method of photomodulation, comprising the steps of separating a light in the region of a specified wavelength from an unpolarized light, separating a first linearly polarized light having a specified plane of polarization from the light and obtaining a second linearly polarized light by rotating the plane of polarization of the first linearly polarized light at a specified angle.
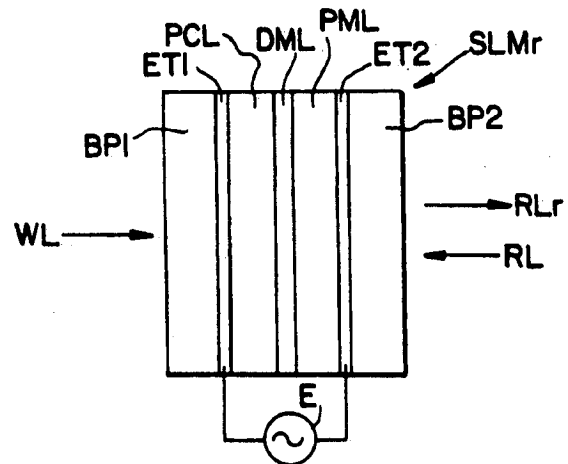
5 Claims, 12 Drawing Sheets
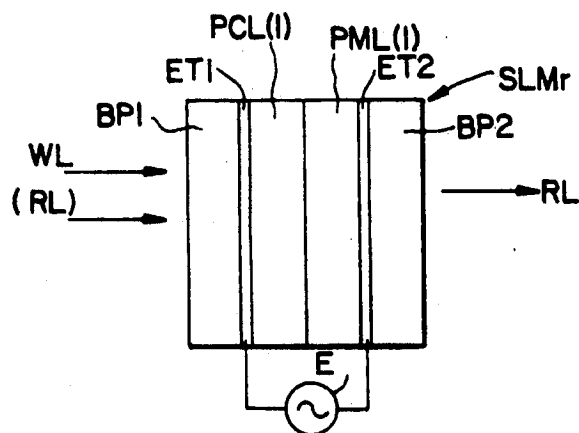
FIG. I
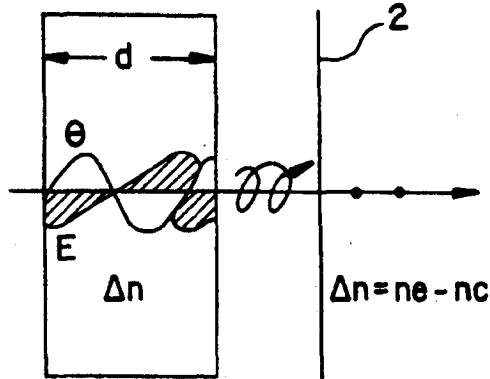PRIOR ART

FIG. 2
PRIOR ART

FIG. 3
PRIOR ART

FIG. 4A

FIG. 4B

FIG. 5

FIG. 6

Es
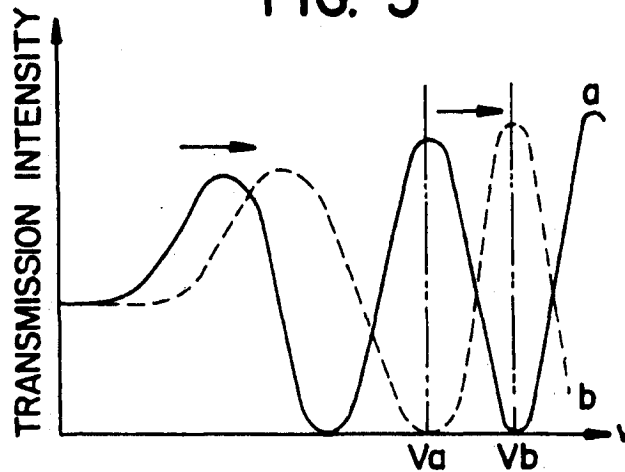
ECBr

6   9

7   LCb   IO

FIG. 7

Ee

ECBr

6   9

7   LCb   8

FIG. 8

Es   PLI   Ee   PL 2

WL

SLMr

RLi
RLo

ECBt
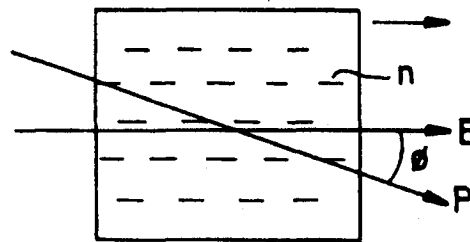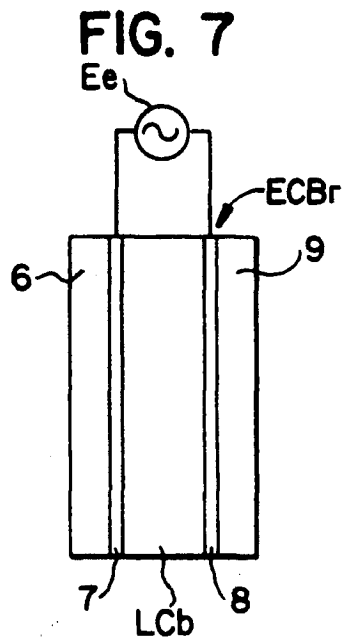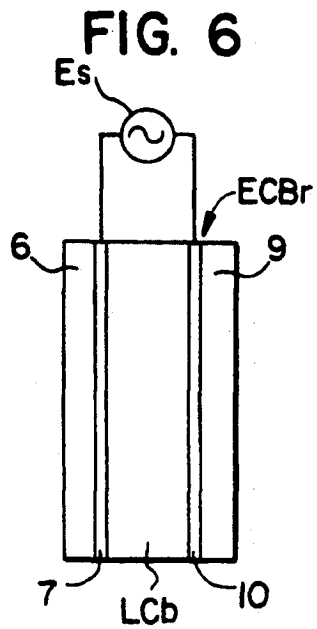
FIG. 9

FIG. 10

DOCKET ALARM
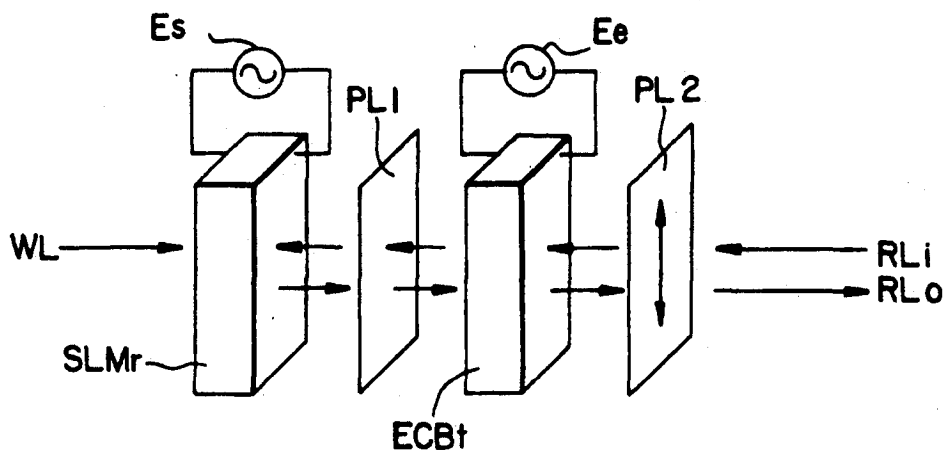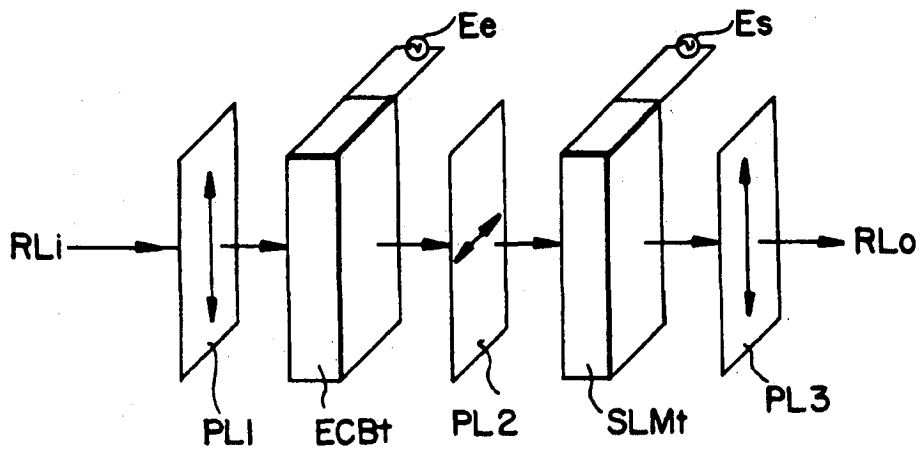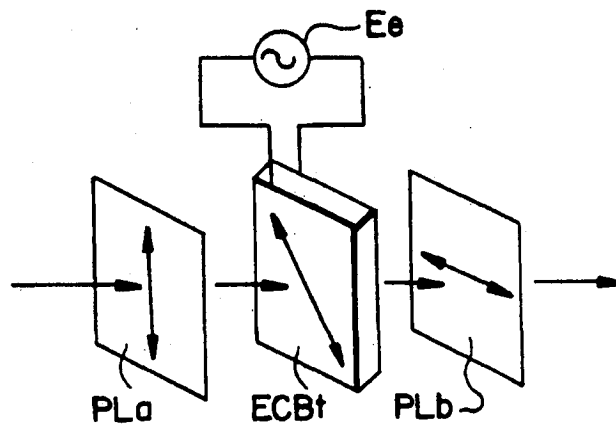
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