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(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) **Title:** COLOR DISPLAY DEVICE

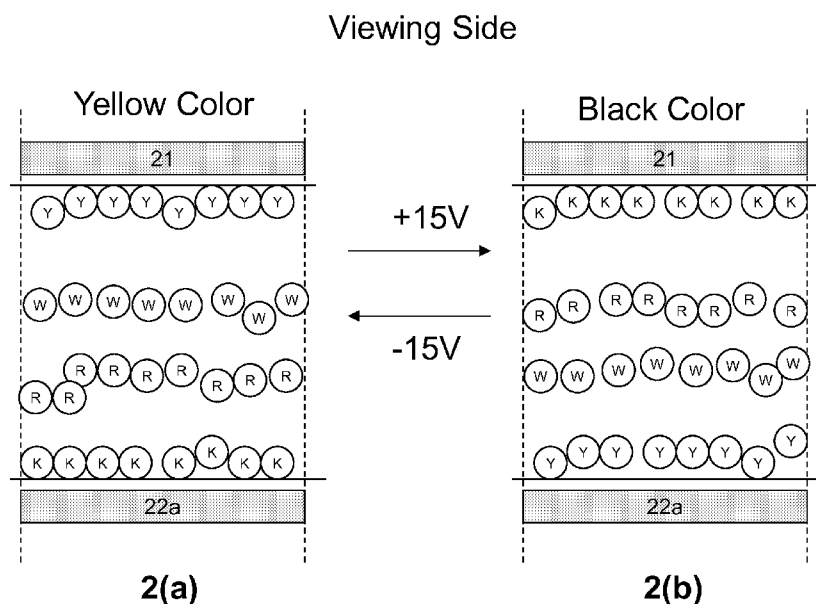


Figure 2-1

(57) **Abstract:** The present invention provides a color display device in which each pixel can display four high quality color states. More specifically, an electrophoretic fluid is provided which comprises four types of particles, dispersed in a solvent or solvent mixture. The fluid may further comprise substantially uncharged neutral buoyancy particles.

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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

A. CLASSIFICATION OF SUBJECT MATTER**G09G 3/34(2006.01)i, G02F 1/167(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G09G 3/34; G02F 1/167; H01L 51/52; G02B 26/00; H01B 3/40; H01B 3/44; H01L 21/44; G02F 1/17

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: electrophoretic, display, particle, pigment, positive, negative, pixel, intensity, waveform, fluid

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0268558 A1 (NAVEEN CHOPRA et al.) 22 November 2007 See paragraphs [0113], [0150], [0174], [0206]; and claim 1.	1-22
A	KR 10-2011-0103765 A (KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY) 21 September 2011 See paragraphs [0004], [0049]-[0055]; claims 1, 5; and figures 1-4a.	1-22
A	US 2010-0055895 A1 (ARTHUR W. ZAFIROPOULOU et al.) 04 March 2010 See paragraphs [0039]-[0045], [0057]-[0062]; and claims 1, 18, 20.	1-22
A	US 2011-0042657 A1 (YIJIAN SHI) 24 February 2011 See paragraphs [0073]-[0075]; and claims 1, 8-9.	1-22
A	JP 2011-158783 A (PANASONIC CORP.) 18 August 2011 See paragraphs [0141]-[0148]; claims 1, 6, 8; and figures 3-7.	1-22



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

"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

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"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

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2014/038229

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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