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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, PE, PG, PH, PL, PT, RO, RS, RU, 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))

Published:

— 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))

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17 November 2011

(54) Title: METHOD FOR DRIVING ELECTRO-OPTIC DISPLAYS

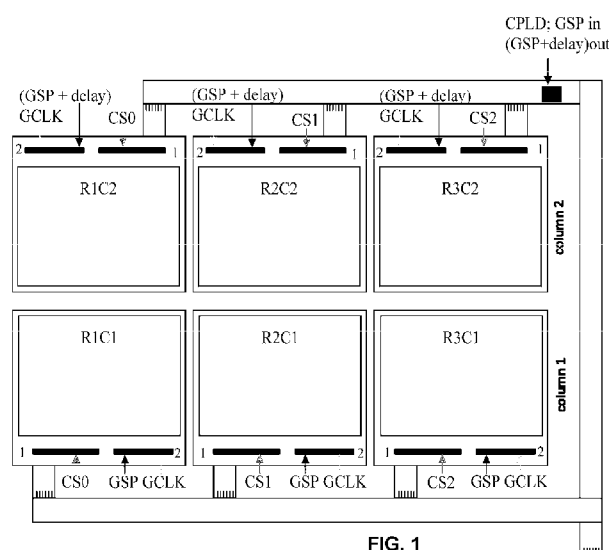


FIG. 1

(57) Abstract: A large area display comprises multiple sub-units (R1C1, R1C2 etc.) arranged in rows and columns. Each sub-unit has associated row (1) and column (2) drivers, with the column driver (2) driving the column electrodes of all the sub-units in a column. A chip select means provides a separate chip select signal (CS0, CS1, CS2) to each row of sub-units, so that only one row of sub-units are scanned at a time, and all the sub-units in the selected row are scanned simultaneously. Column data are supplied to the column drivers (2) as a linear series of column data values; and delayed Gate Start Pulse signals (GSP + delay) are fed to the column drivers (2) in each column of sub-units after the first so that these column drivers (2) receive the delayed Gate Start Pulse signals and apply the appropriate column data values to their associated column electrodes.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/023340**A. CLASSIFICATION OF SUBJECT MATTER****G09G 3/20(2006.01)i, G09G 3/34(2006.01)i, G09G 3/38(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 3/20; G09G 3/34; G09G 3/30

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: electro, optic, display, driver, gate, delay, column.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0046591 A1 (HIDEAKI SHISHIDO et al.) 01 March 2007 See the abstract, paragraph [0479]-[0483], figures 56 and 57.	1-15
A	US 2009-0237350 A1 (YAMADA TOSHIMICHI) 24 September 2009 See the abstract, paragraph [0054]-[0058], figure 1.	1-15
A	US 2009-0189848 A1 (MAEDA HIROSHI) 30 July 2009 See the abstract, paragraph [0059]-[0065], figure 1.	1-15

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"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

Date of the actual completion of the international search

26 SEPTEMBER 2011 (26.09.2011)

Date of mailing of the international search report

26 SEPTEMBER 2011 (26.09.2011)

Name and mailing address of the ISA/KR

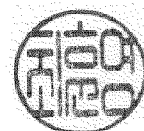
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/023340**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 16
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
Claim 16 is not clear to make meaningful search.
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2011/023340

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