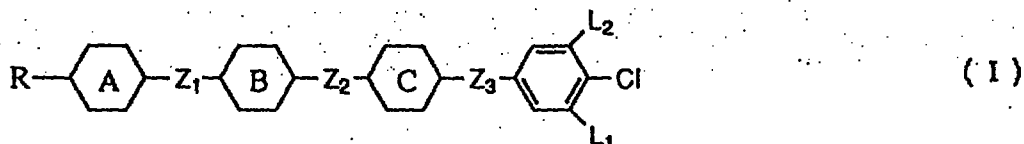


ABSTRACT

Chlorobenzene derivatives which have the following four-ring structure and are preferably usable for display devices of active matrix mode, and liquid crystal compositions comprising the derivative are provided:



wherein ring A, ring B, ring C independently represent trans-1,4-cyclohexylene group or 1,4-phenylene group one or more hydrogen atoms on the six-membered ring of which may be replaced by halogen atoms, Z_1 , Z_2 , and Z_3 represent $-\text{CH}_2\text{CH}_2-$ or covalent bond, respectively, provided that at least one of them represents $-\text{CH}_2\text{CH}_2-$, L_1 and L_2 represent H or halogen atom, and R represents an alkyl group or alkoxy group having 1 to 10 carbon atoms provided that when Z_1 and Z_3 represent covalent bond and Z_2 represents $-\text{CH}_2\text{CH}_2-$, ring A represents 1,4-phenylene group, and when Z_1 and Z_2 represent covalent bond, and Z_3 represents $-\text{CH}_2\text{CH}_2-$, in no case represents ring A trans-1,4-cyclohexylene group and both ring B and ring C represent 1,4-phenylene group at the same time.

The liquid crystalline compounds have both of a large optical anisotropy and a large dielectric anisotropy, exhibit a liquid crystal phase at a wide temperature range, and have a good miscibility with known liquid crystalline compounds at low temperatures, and thus they can provide liquid crystal compositions particularly preferable for TFT mode.

T. Kawakita