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(54) Title: OPTICAL COMPENSATION FILMS HAVING POSITIVE BIREFRINGENCE FOR LIQUID CRYSTAL DISPLAY

(57) Abstract: A method for controlling positive birefringence in an optical compensation film (positive C-plate) having high positive birefringence throughout the wavelength range $400\text{ nm} < \lambda < 800\text{ nm}$ is provided. The method includes selecting polymers with optically anisotropic subunits (OASUs) that exhibit the buttressing effect, wherein the OASUs may be disks, mesogens or aromatic rings substituted with birefringence enhancing substituents. The method further includes processing the polymer by solution casting to yield a polymer film with high birefringence without the need for stretching, photopolymerization, or other processes. These optical compensation films may be used in LCDs, particularly IPS-LCDs.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

G02F G02B C08J

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

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

EPO-Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 2005/270458 A1 (ISHIKAWA TOMOHIRO [US] ET AL) 8 December 2005 (2005-12-08) cited in the application	1,2, 5-51,55, 62-111, 162-180
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International application No

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^Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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