Title (en)

DISPLAY WITH A DIELECTRIC STACK FILTER

Title (de)

ANZEIGE MIT EINEMIELEKTRISCHEN STAPELFILTER

Title (fr)

AFFICHAGE COMPORTANT UN FILTRE A EMPILEMENT DIELECTRIQUE

Publication

EP 1004053 A1 20000531 (EN)

Application

EP 98938788 A 19980811

Priority

- GB 9802413 W 19980811
- GB 9717394 A 19970815

Abstract (en)

[origin: WO9909452A1] A display has a modulator, preferably a liquid-crystal cell, adapted to modulate activating UV light (23, 25) input from the rear of the cell on to phosphor-type output elements (7) at the viewer side of the cell, and a pre-collimating device (11) such as a prismatic sheet for partially collimating the input light before it reaches the cell, in order to improve the contrast of the liquid-crystal modulator. In the invention a further collimator is included in the form of a dielectric stack filter (9) between the cell (1) and the output elements (7). This filter is tuned to block the essentially monochromatic input light (25a) emerging from the cell at angles greater than a predetermined angle to the normal to the cell, and also acts to block the passage of light at visible wavelengths. This ensures a good light throughput while eliminating the most harmful (i.e. contrast-degrading) off-axis rays.

IPC 1-7

G02F 1/1335

IPC 8 full level

G02B 5/23 (2006.01); **G02B 5/28** (2006.01); **G02F 1/1335** (2006.01); **G02F 1/13357** (2006.01); **G09F 9/00** (2006.01); **G09F 9/30** (2006.01)

CPC (source: EP KR)

G02F 1/133617 (2013.01 - EP KR); **G02F 1/133621** (2013.01 - KR); G02F 1/13363 (2013.01 - KR)

Citation (search report)

See references of WO 9909452A1

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

WO 9909452 A1 19990225; AU 8739298 A 19990308; CN 1276067 A 20001206; EP 1004053 A1 20000531; GB 9717394 D0 19971022; JP 2001516066 A 20010925; KR 20010022945 A 20010326

DOCDB simple family (application)

GB 9802413 W 19980811; AU 8739298 A 19980811; CN 98810106 A 19980811; EP 98938788 A 19980811; GB 9717394 A 19970815; JP 2000510058 A 19980811; KR 20007001553 A 20000215