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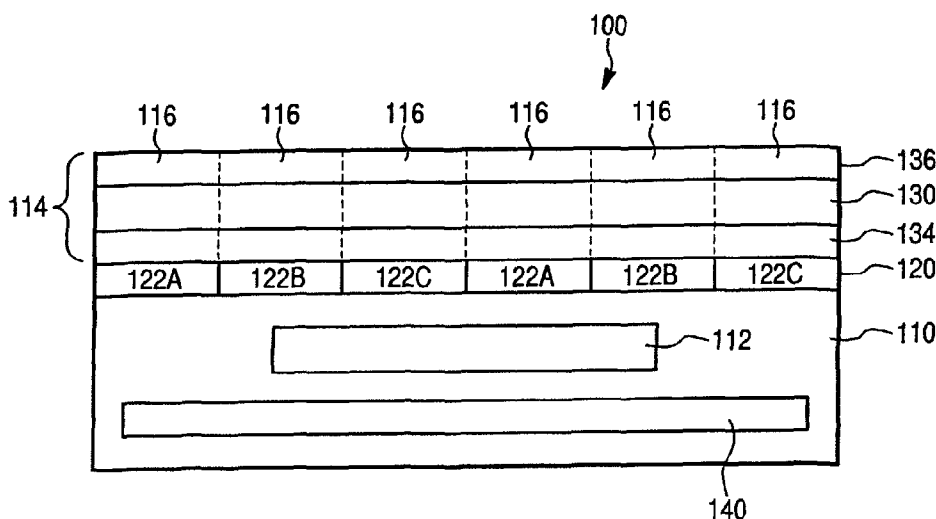
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(54) Title: DISPLAY SUBSTRATE WITH REFLECTIVE COLOR FILTERS



(57) Abstract: An optical display device (100). The device includes a substrate (110) having a source of light (112), the light from the source of light including a plurality of primary colors. The device also includes a modulation array (114) comprising a plurality of modulation elements (116) arranged to modulate light received from the source of light (112), each of the modulation elements (116) comprising a portion of a liquid crystal layer (130). The device also includes a reflective color filter array (120) having a plurality of color filters (122A, 122B, 122C), each of the plurality of color filters arranged to correspond to a respective element of the modulation array, each of the plurality of color filters transmitting light having one of the primary colors and reflecting light of the remaining light having other of the primary colors back to the substrate, the reflective color filter array (120) arranged relative to the substrate (110) such that there are no layers which substantially absorb light of the primary colors between the substrate (110) and the reflective color filter array. The device also includes a reflective panel (140) which reflects the reflected light having the primary colors back towards the reflective color filter array.

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