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(54) Title: SYSTEM AND METHOD FOR THERMALLY CONTROLLING AN ELECTRONIC DISPLAY

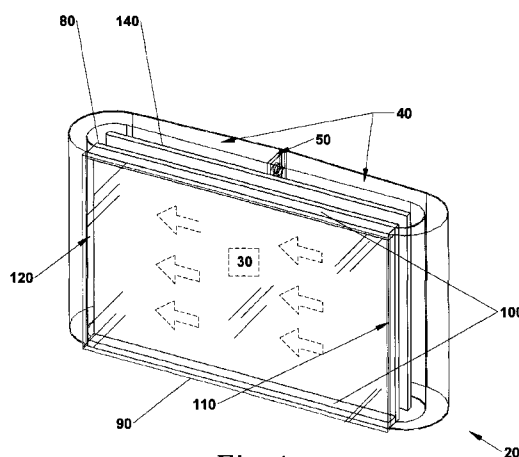


Fig. 4

(57) Abstract: Embodiments relate generally to various thermal control features for electronic displays. One feature comprises a closed loop isolated gas chamber, where a first chamber is in contact with the display surface and transfers heat between the isolated gas and the display surface. A second chamber is in gaseous communication with the first chamber and is adapted to heat or cool the isolated gas and reintroduce the isolated gas into the first chamber. Another feature uses constricted convection to facilitate the cooling of the backlight assembly for the electronic display. Another feature uses an air curtain to further heat or cool the exterior viewing surface of the display. Another feature uses a linear polarizer with an insulating gap to reduce the solar loading of the display stack and provide insulation from the ambient air temperature. Another feature uses a fluid system to contact fluid coolant with the display surface in order to cool the display. Each of the features may be used alone, or in combination to provide the proper operating temperature for the display depending on its desired operating environment.



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