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Nakajima

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(54) **TACTILELY ENHANCED VISUAL IMAGE DISPLAY**

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(58) **Field of Classification Search** 345/173–179; 178/18.01, 18.1, 19.01, 18.06
See application file for complete search history.

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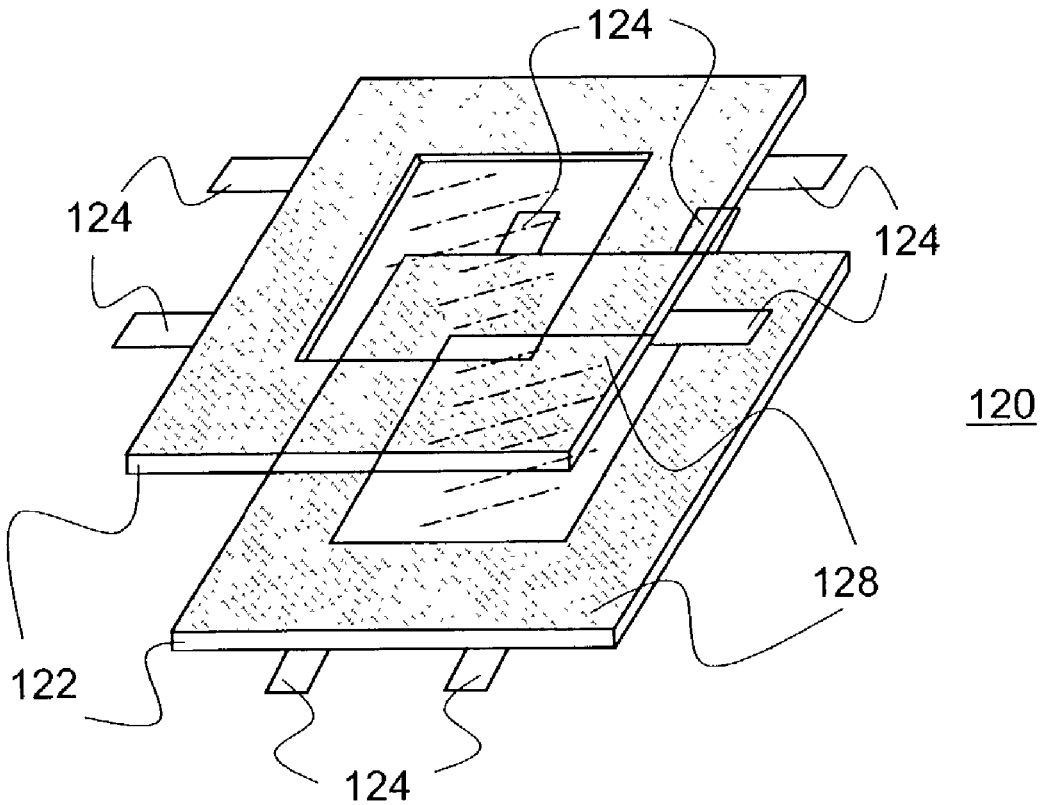
(57) **ABSTRACT**

A tactile display layer is provided on a back side of a flexible visual display layer of a display to facilitate selective tactile pushing against different portions of the flexible visual display layer. In one embodiment, the display further includes a sensor circuit to sense user touching of activated ones of tactile pistons of the tactile display layer. In one embodiment, the display further includes a transparent touch sensitive layer disposed on a viewing side of the flexible visual display layer, with its effective touch sensitive area limited to a perimeter area surrounding the effective area of the tactile display layer.

12 Claims, 5 Drawing Sheets