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(54) TACTILE DISPLAY DEVICE AND TOUCH PANEL APPARATUS WITH TACTILE DISPLAY FUNCTION

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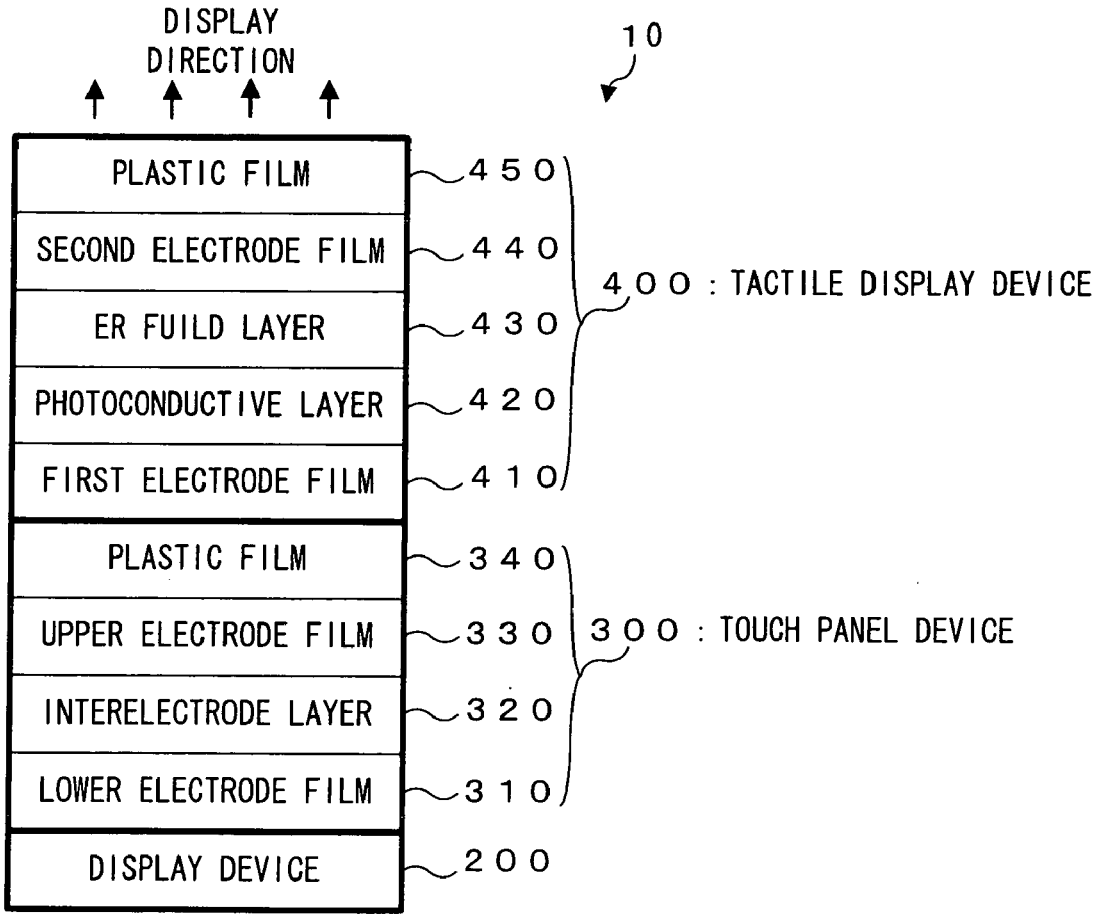
(57) **ABSTRACT**

Conductivity of a photoconductive layer **420** changes in accordance with a display pattern made of black and white, which is displayed on a display device **200** of a touch panel apparatus with tactile display function **10**. With this change of the conductivity, viscosity of an electrorheological fluid layer **430** changes in accordance with this display pattern. This change of the viscosity is presented to an operator, as tactile information corresponding to the display pattern displayed as the visual information.