

2. The tactile display device according to claim 1, wherein said characteristic change layer is a photoconductive layer, the conductivity of which changes at each part on the display screen in response to the intensity of the display light.
3. The tactile display device according to claim 1, further comprising
- an elastic layer beneath said electrorheological fluid layer above the display screen, said elastic layer having elastic modulus less than that of said electrorheological fluid layer.
4. The tactile display device according to claim 2, further comprising
- an elastic layer beneath said electrorheological fluid layer above the display screen, said elastic layer having elastic modulus less than that of said electrorheological fluid layer.
5. The tactile display device according to claim 1, further comprising
- a flexible substrate having a light transmissive property, wherein
 - said pair of electrodes, said characteristic change layer and said electrorheological fluid layer are disposed above said flexible substrate.
6. The tactile display device according to claim 3, further comprising
- a flexible substrate having a light transmissive property, wherein
 - said pair of electrodes, said characteristic change layer and said electrorheological fluid layer are disposed above said flexible substrate.
7. A touch panel apparatus with tactile display function, said touch panel apparatus comprising:
- an optically transparent touch panel disposed opposite to a display screen for outputting display light and for allowing an input operation of depressing a part of said optically transparent touch panel corresponding to a part of the display screen in which visual information was displayed, the visual information displayed as the display pattern on the display screen and the visual information being for prompting the input operation; and
 - said tactile display device according to claim 1 disposed opposite to said optically transparent touch panel at a side different from another side where said optically transparent touch panel is directed toward the display screen.
8. The touch panel apparatus with tactile display function according to claim 7, further comprising
- a change addition device for further changing the viscosity of at least a part of said electrorheological fluid layer, if said at least a part of said electrorheological fluid layer is depressed.
9. The touch panel apparatus with tactile display function according to claim 7, further comprising
- a display device having the display screen and for displaying the visual information on the display screen.
10. The touch panel apparatus with tactile display function according to claim 8, further comprising
- a display device having the display screen and for displaying the visual information on the display screen.
11. A touch panel apparatus with tactile display function comprising:
- a tactile display device disposed on a display screen for outputting display light corresponding to a display pattern, said device comprising: (1) a pair of electrodes having a light transmissive property and disposed opposite to the display screen; (2) a characteristic change layer disposed between said pair of electrodes, said characteristic change layer having a light transmissive property, wherein at least one of conductivity and magnetic permeability of said characteristic change layer changes at each part on the display screen in response to intensity of the display light; and (3) an electrorheological fluid layer disposed between said pair of electrodes and opposite to said characteristic change layer, said electrorheological fluid layer having a light transmissive property, wherein viscosity of said electrorheological fluid layer changes at each part on the display screen in response to applied voltage applied through said characteristic change layer by said pair of electrodes;
 - an optically transparent touch panel disposed between said tactile display device and the display screen and opposite to the display screen, said optically transparent touch panel allowing an input operation of depressing a part corresponding to a part of the display screen in which visual information was displayed, the visual information displayed as the display pattern on the display screen and the visual information being for prompting the input operation; and
 - a change addition device for further changing the viscosity of at least a part of said electrorheological fluid layer, if said at least a part of said electrorheological fluid layer is depressed.
12. The touch panel apparatus with tactile display function according to claim 8, further comprising
- a display device having the display screen and for displaying the visual information on the display screen, wherein
 - said change addition device further changes the viscosity for a change of the visual information by said display device.
13. The touch panel apparatus with tactile display function according to claim 11, further comprising
- a display device having the display screen and for displaying the visual information on the display screen, wherein
 - said change addition device further changes the viscosity for a change of the visual information by said display device.