

ABSTRACT OF THE DISCLOSURE

SEMICONDUCTOR DEVICE, INK CARTRIDGE, AND ELECTRONIC DEVICE

5 A semiconductor device includes: a semiconductor substrate including an active
element formation face on which an active element is formed, and a rear face that is on a
side opposite to the active element formation face; a penetration electrode penetrating
the semiconductor substrate; an element electrode formed on or above the active element
formation face; detection electrodes formed on or above the rear face, electrically
10 connected to the element electrode via the penetration electrode, and detecting a
remaining amount of the ink by being wet in the ink; a storage circuit storing the
remaining amount of ink; an antenna formed on either one of the active element
formation face and the rear face, transmitting and receiving information; and a control
circuit controlling the detection electrodes, the antenna, and the storage circuit.

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Figure 2