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(71) Applicant (for all designated States except US): SEMI-
CONDUCTOR ENERGY LABORATORY CO., LTD.
[JP/JP]; 398, Hase, Atsugi-shi, Kanagawa, 2430036 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KATO, Kiyoshi
[JP/JP]; c/o SEMICONDUCTOR ENERGY LABORA-

TORY CO., LTD., 398, Hase, Atsugi-shi, Kanagawa,
2430036 (JP). KOYAMA, Jun.

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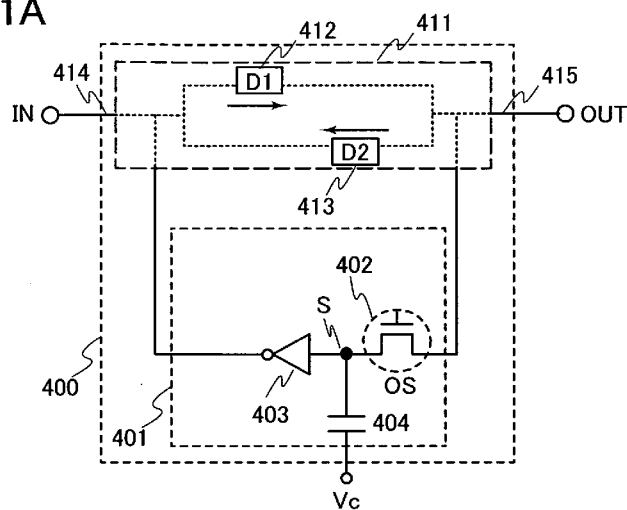
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(54) Title: NONVOLATILE LATCH CIRCUIT AND LOGIC CIRCUIT, AND SEMICONDUCTOR DEVICE USING THE
SAME

FIG. 1A



(57) Abstract: To provide a novel nonvolatile latch circuit and a semiconductor device using the nonvolatile latch circuit, a non-volatile latch circuit includes a latch portion having a loop structure where an output of a first element is electrically connected to an input of a second element, and an output of the second element is electrically connected to an input of the first element; and a data holding portion for holding data of the latch portion. In the data holding portion, a transistor using an oxide semiconductor as a semiconductor material for forming a channel formation region is used as a switching element. In addition, an inverter electrically connected to a source electrode or a drain electrode of the transistor is included. With the transistor, data held in the latch portion can be written into a gate capacitor of the inverter or a capacitor which is separately provided.