



US 20040164359A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0164359 A1**

Iwata et al.

(43) **Pub. Date: Aug. 26, 2004**

(54) **SEMICONDUCTOR STORAGE DEVICE, ITS MANUFACTURING METHOD AND OPERATING METHOD, AND PORTABLE ELECTRONIC APPARATUS**

Publication Classification

(51) **Int. Cl.⁷ H01L 21/8238; H01L 29/76**

(52) **U.S. Cl. 257/379; 438/200**

(76) **Inventors: Hiroshi Iwata, Nara (JP); Akihide Shibata, Nara (JP)**

(57) **ABSTRACT**

Correspondence Address:
**BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747 (US)**

The present invention provides a semiconductor storage device having: a first conductivity type region formed in a semiconductor layer; a second conductivity type region formed in the semiconductor layer in contact with the first conductivity type region; a memory functional element disposed on the semiconductor layer across the boundary of the first and second conductivity type regions; and an electrode provided in contact with the memory functional element and on the first conductivity type region via an insulation film, and a portable electronic apparatus comprising the semiconductor storage device. The present invention can fully cope with scale-down and high-integration by constituting a selectable memory cell substantially of one device.

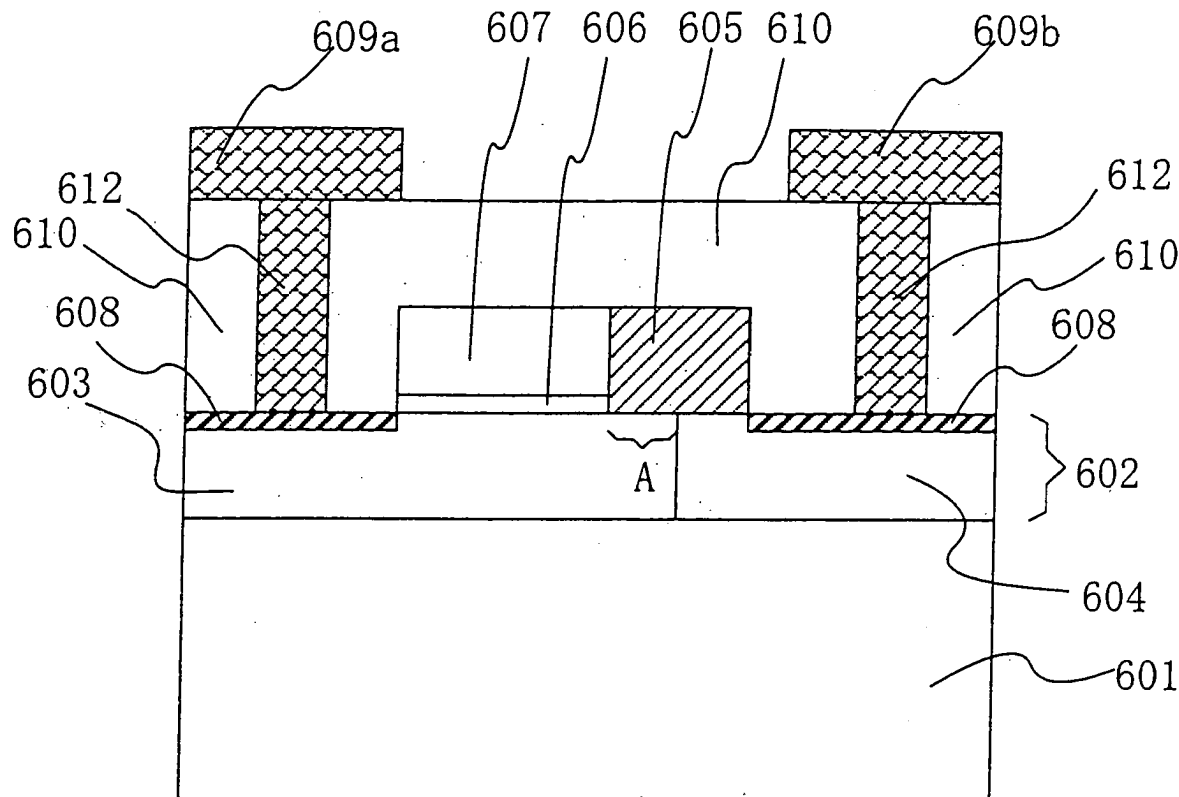
(21) **Appl. No.: 10/480,893**

(22) **PCT Filed: Nov. 18, 2002**

(86) **PCT No.: PCT/JP02/12028**

(30) **Foreign Application Priority Data**

Nov. 21, 2001 (JP) 2001-356549



IP Bridge Exhibit 2218

FIG. 1 (a)

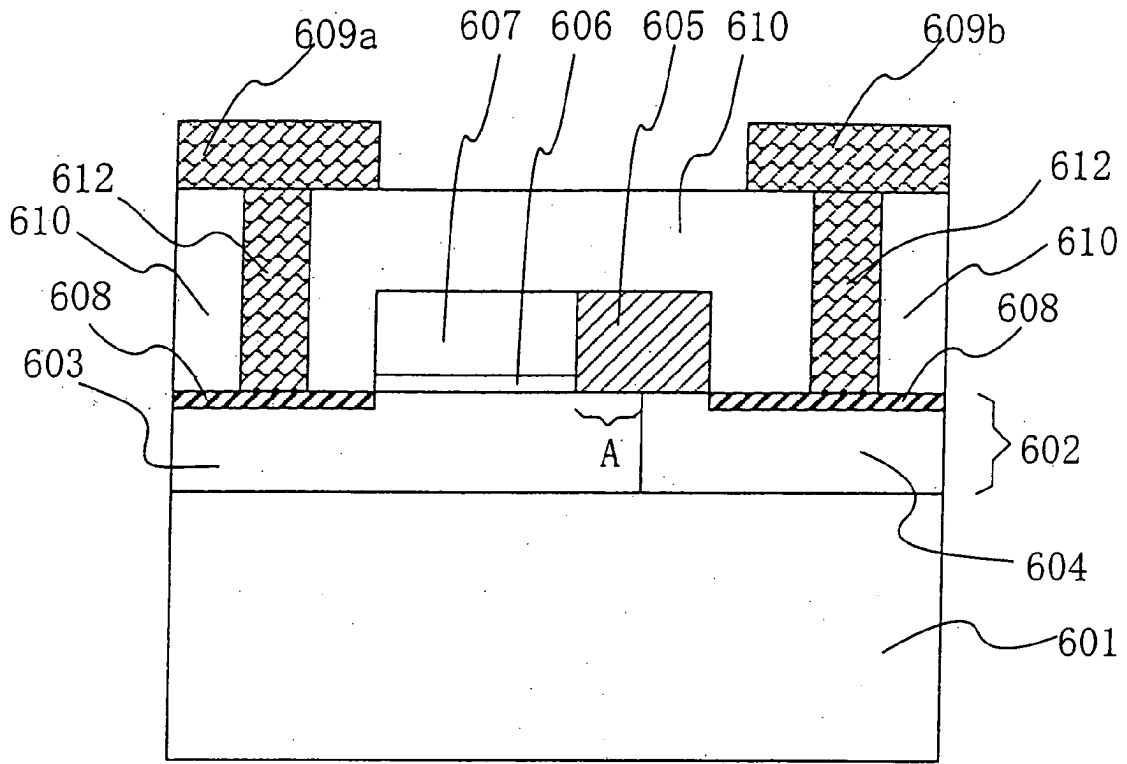


FIG. 1(b)

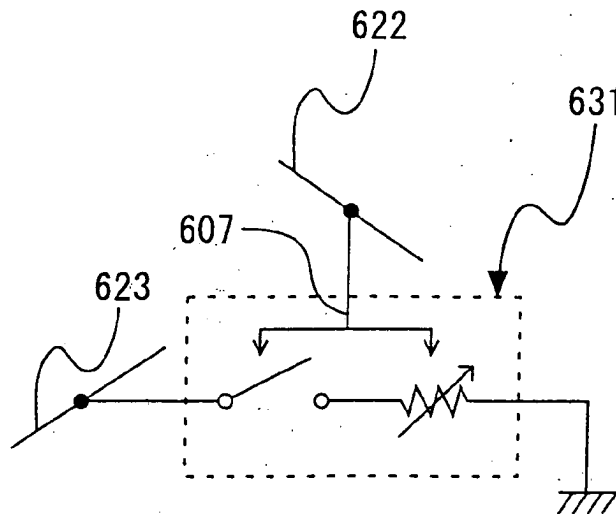


FIG. 2

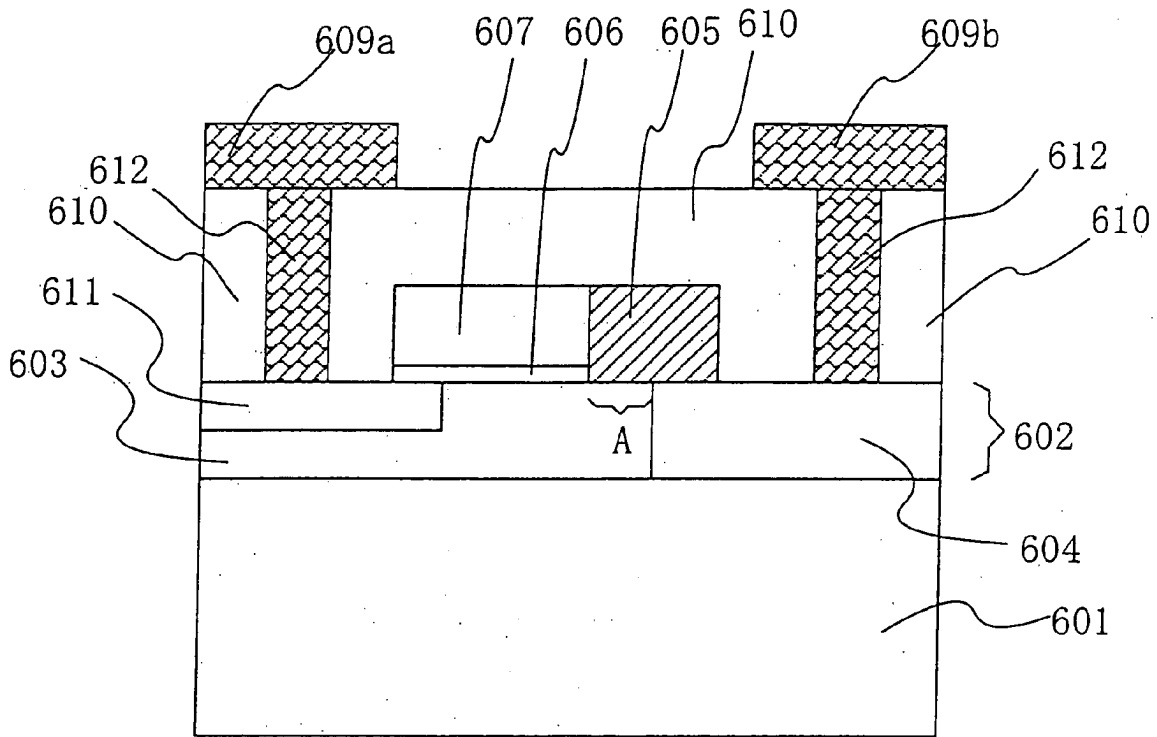


FIG. 3

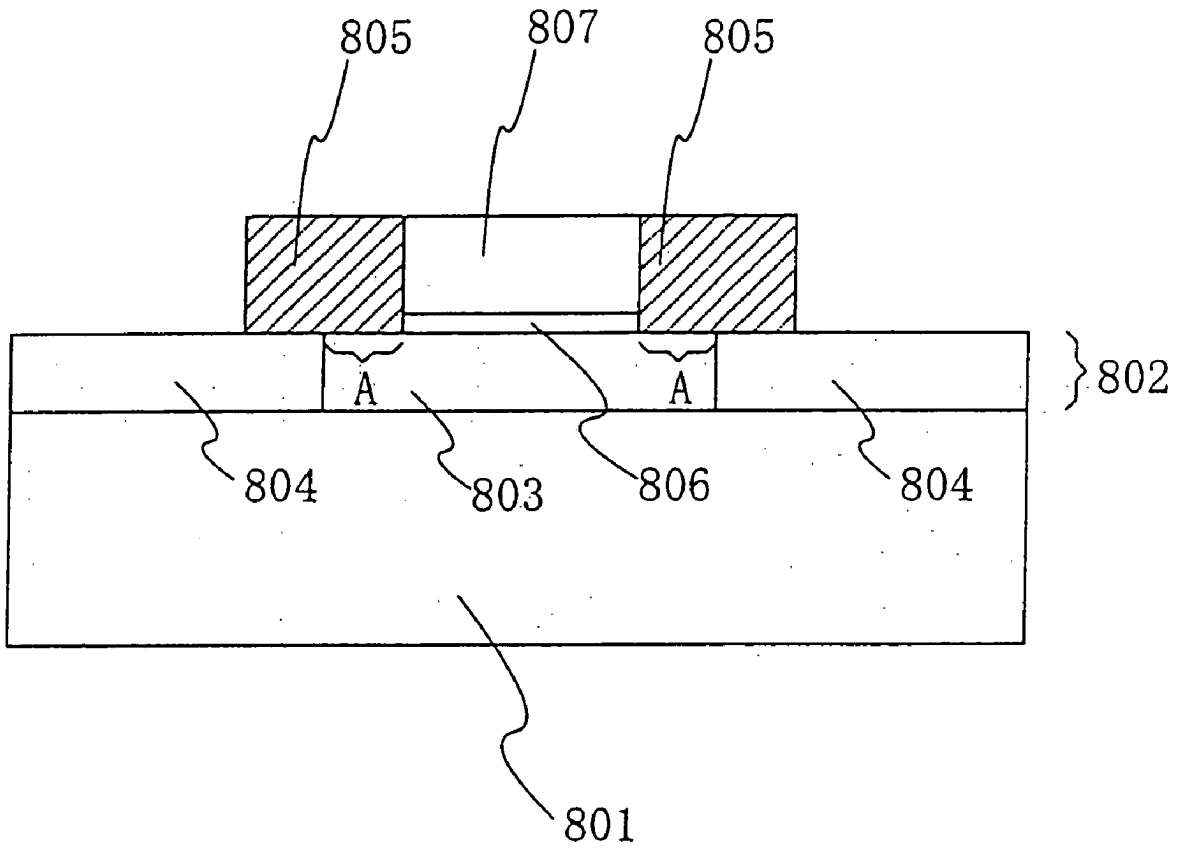
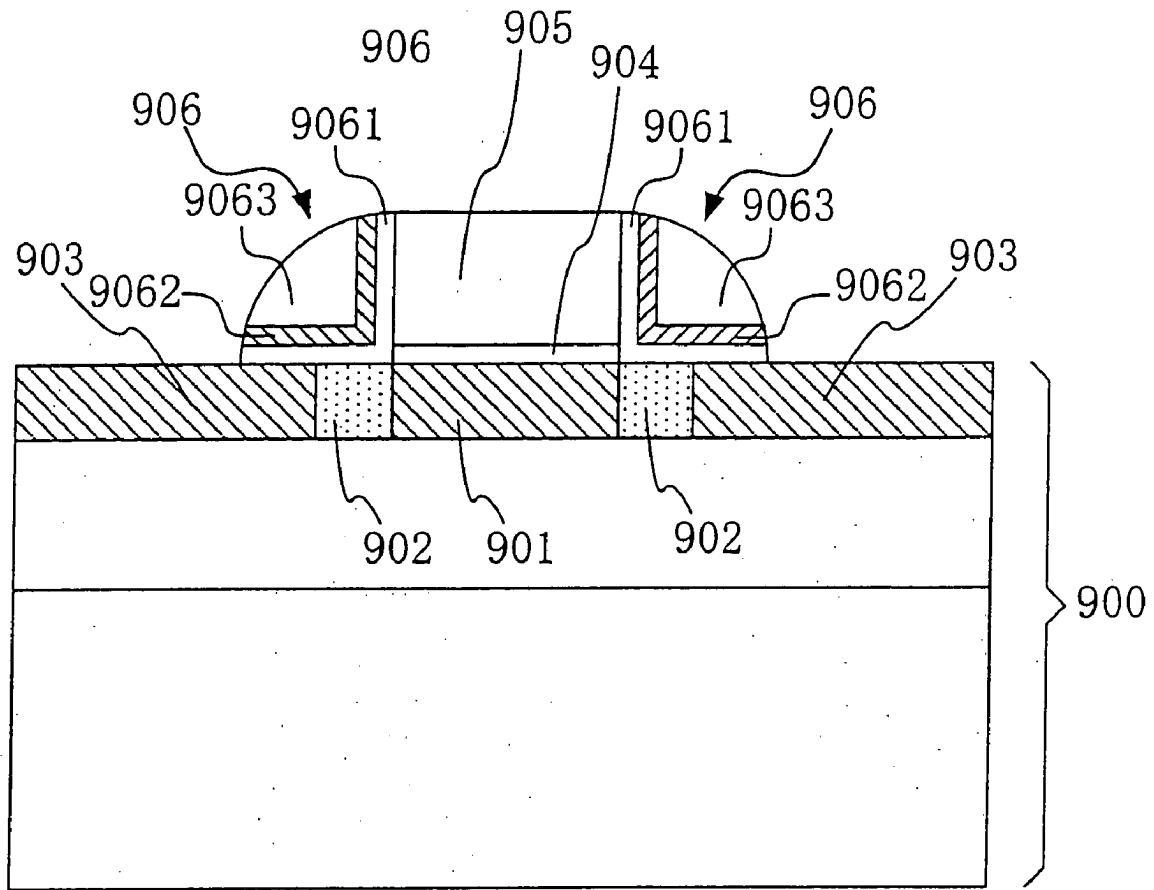


FIG. 4



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