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(71) Applicant: INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).

(72) Inventor: BROSS, Kevin; 15411 SW Peach Tree Drive, Tigard, OR 97224 (US).

(74) Agents: MALLIE, Michael, J. et al.; Blakely Sokoloff Taylor & Zafman, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, CA 90025 (US).

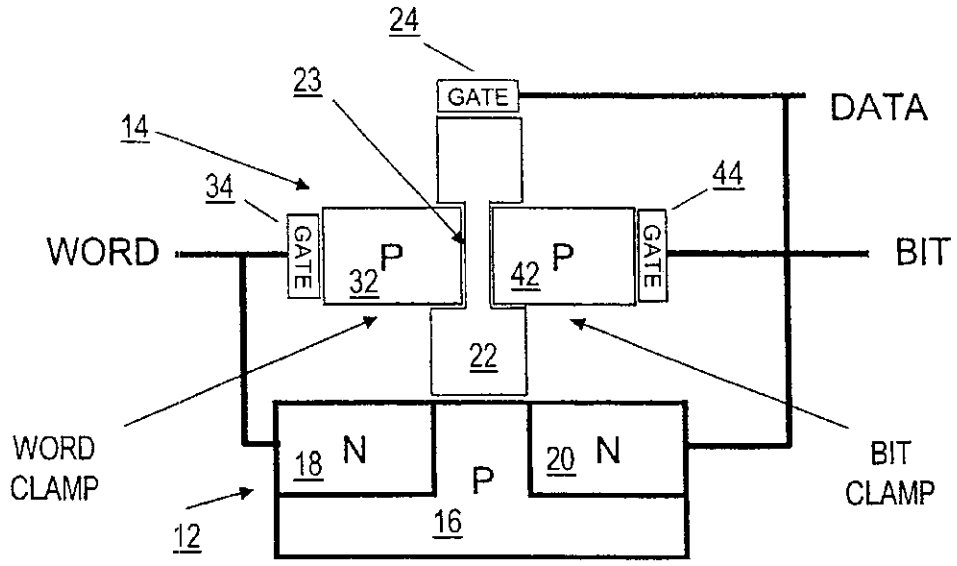
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(54) Title: HOURGLASS RAM



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(57) Abstract: An integrated circuit having a non-volatile HGRAM cell includes a first section (2) having impurity materials implanted into a substrate (16) to form NPN transistor regions (18, 20) and a second section having (14) a gate structure to control the currents conducted in the NPN transistor regions. The gate structure (14) is formed at least above the P-type channel region of the substrate and includes an hourglass shaped material with gates to control the movement of holes through the restricted portion of the hourglass.

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