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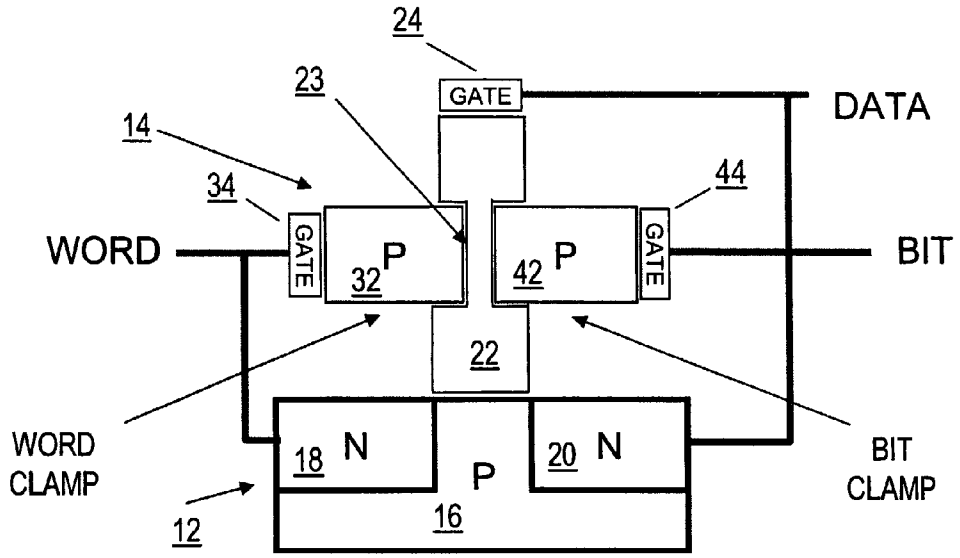
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(54) Title: HOURGLASS RAM



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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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