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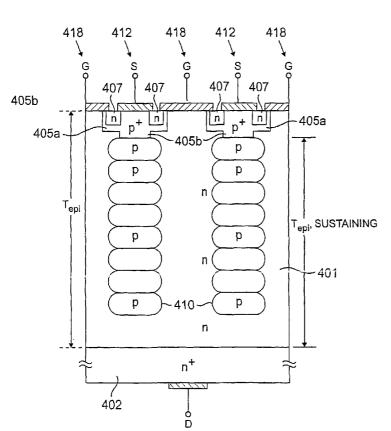
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(54) Title: METHOD FOR FABRICATING A HIGH VOLTAGE POWER MOSFET HAVING A VOLTAGE SUSTAINING REGION THAT INCLUDES DOPED COLUMNS FORMED BY RAPID DIFFUSION



(57) Abstract: A method of fabricating a high voltage power MOSFET having a voltage-sustaining region that includes doped columns (410) formed by rapid diffusion. A semiconductor device having a substrate (402), an epitaxial layer (401) and a voltage-sustaining region formed in the epitaxial layer (401), the voltage-sustaining region including columns (410) formed along at least outer sidewalls of a filled trench, the column (410) including first, second and third diffused regions, the first diffused region having a deeper junction depth than the second diffused region and the third diffused region extends from the surface of the epitaxial layer (401) to intersect one of the first and second diffused regions.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/41808

PC(7)	A. CLASSIFICATION OF SUBJECT MATTER			
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