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#### (54) CHEMICAL MECHANICAL POLISHING OF METAL GATE CUTS FORMED AFTER SOURCE AND DRAIN CONTACTS

(71) Applicant: Intel Corporation, Santa Clara, CA

(72) Inventors: Matthew J. Prince, Portland, OR (US); Lawrence Zaino, Beaverton, OR (US); Barry B. Butler, Hillsboro, OR (US); Girish Sharma, Hillsboro, OR (US); Robert R. Mitchell, Portland, OR (US); Rajaram A. Pai, Lake Oswego, OR (US); Niels Sveum, Portland, OR (US); Alison V. Davis, Portland, OR (US); Chun Chen Kuo, Portland, OR (US); Reza Bayati, Portland, OR (US); Swapnadip Ghosh, Hillsboro, OR (US)

(73) Assignee: Intel Corporation, Santa Clara, CA (US)

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#### ABSTRACT (57)

Techniques are provided herein to form semiconductor devices that include a gate cut formed after the formation of source or drain contacts and with a top surface that is substantially coplanar with a top surface of the source or drain contacts. An example semiconductor device includes a gate structure around or otherwise on a semiconductor region and a dielectric layer present on a top surface of the gate structure. Conductive contacts are formed over source and drain regions along a source/drain contact recess or trench. The gate structure may be interrupted with a gate cut that extends through an entire thickness of the gate structure and includes a dielectric material. A top surface of the gate cut may be polished until it is substantially coplanar with a top surface of the dielectric layer over the gate structure and a top surface of the source or drain contacts.

