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(54) **Title:** CMP OF COPPER/RUTHENIUM SUBSTRATES

(57) **Abstract:** The invention provides a method of chemically-mechanically polishing a substrate. A substrate comprising ruthenium and copper is contacted with a chemical-mechanical polishing system comprising a polishing component, hydrogen peroxide, an organic acid, at least one heterocyclic compound comprising at least one nitrogen atom, and water. The polishing component is moved relative to the substrate, and at least a portion of the substrate is abraded to polish the substrate. The pH of the polishing system is 6 to 12, the ruthenium and copper are in electrical contact, and the difference between the open circuit potential of copper and the open circuit potential of ruthenium in the polishing system is 50 mV or less.

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