Post-Cu CMP cleaning에서 연마입자 제거에 buffing 공정이 미치는 영향

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The effect of buffing on particle removal in Post-Cu CMP cleaning

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Abstract: Copper (Cu) has been widely used for interconnection structure in intergrated circuits because of its properties such as a low resistance and high resistance to electromigration compared with aluminuim. Damascene processing for the interconnection structure utilizes 2-steps chemical mechanical polishing(CMP). After polishing, the removal of abrasive particles on the surfaces becomes as important as the polishing process. In the paper, buffing process for the removal of colloidal silica from polished Cu wafer was proposed and demonstrated.