CMP COMPOSITIONS AND METHODS FOR SUPPRESSING POLYSILICON REMOVAL RATES

ABSTRACT

The present invention provides a chemical-mechanical polishing (CMP) composition suitable for polishing a silicon nitride-containing substrate while suppressing polysilicon removal from the substrate. The composition comprises abrasive particles suspended in an acidic aqueous carrier containing a surfactant comprising an alkyne-diol, an alkyne diol ethoxylate, or a combination thereof. Methods of polishing a semiconductor substrate therewith are also disclosed.

Figure 2