**ABSTRACT**

NEW ALIGNMENT MARK SCHEME FOR STI PROCESS TO SAVE ONE MASK STEP

A method of fabrication an alignment mark in a semiconductor device. The method uses one mask to that has two functions (1) a reverse active areas mask to remove the oxide from over active areas in the device areas and (2) an alignment mark open mask that removes the oxide from over the alignment mark area. The mask improves chemical-mechanical polish performance in the cell areas by removing the oxide over the active areas. Another key feature of the invention is the spacing of the alignment mark trenches that ensures that the step distance between the top of the second insulating layer in the alignment mark trench and the top surface of the substrate is greater than 2000 Å. This insures that the alignment marks are readable.

(FIGURE 1A IS SUGGESTED FOR PUBLICATION)