Figure 1

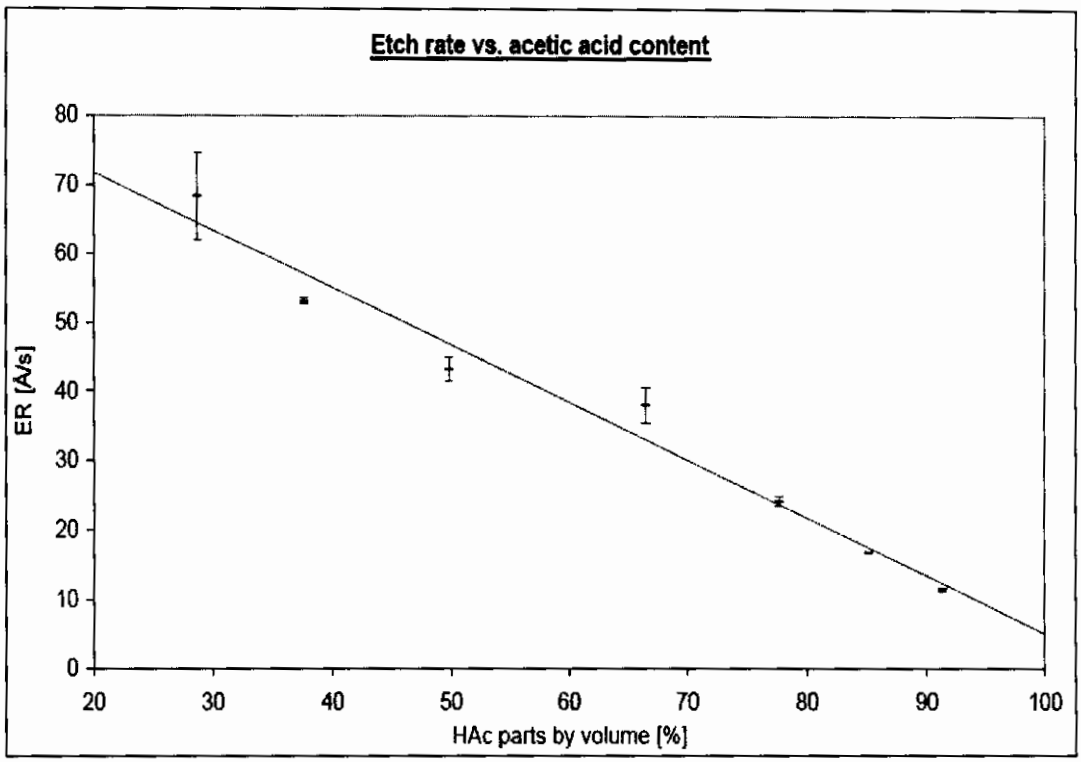


Figure 1: Etch rate on SOI vs the acetic acid content (in volume %)

Figure 2

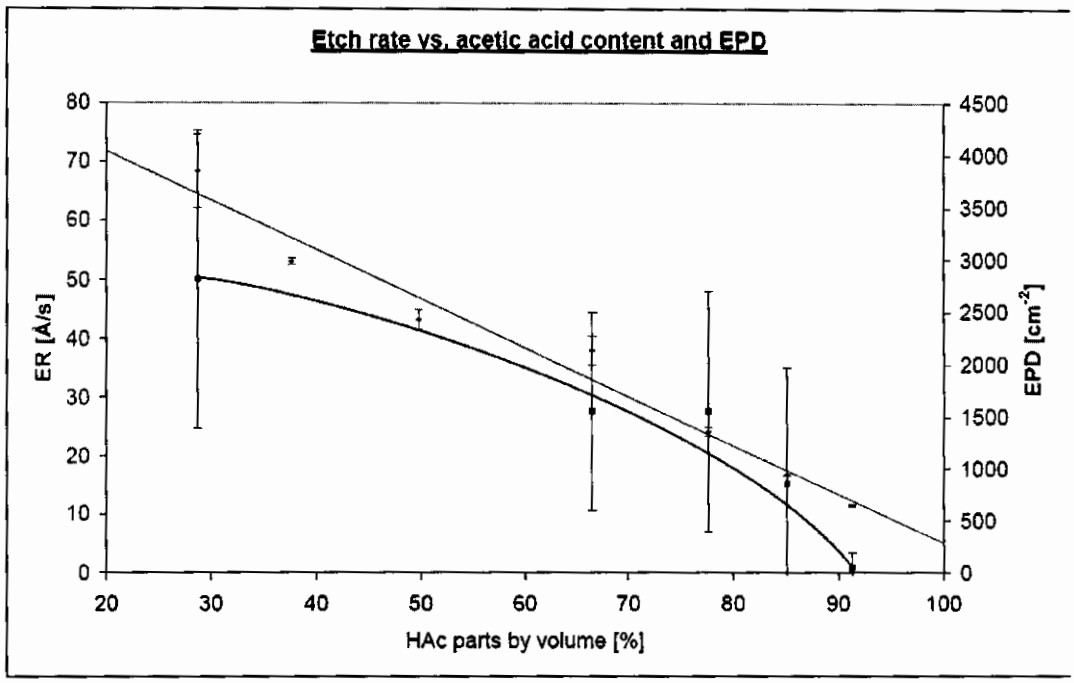


Figure 2: Evolution of the etch rate vs the acetic acid content and its influence in terms of etch pits densities (EPD) in cm^{-2}.

Figure 3

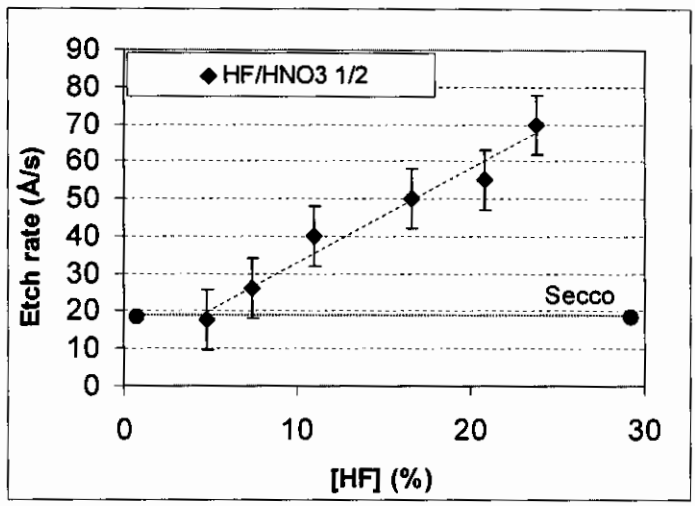


Figure 3: Variation of the etch rate (Å/s) as a function of the HF concentration, for a ratio HF/HNO_3 1/2 (acid acetic and HF are variable).

Figure 4

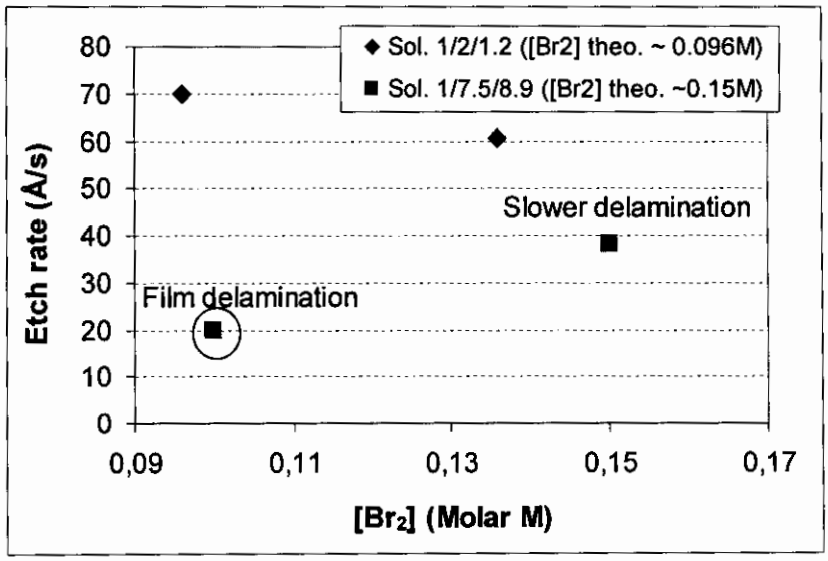
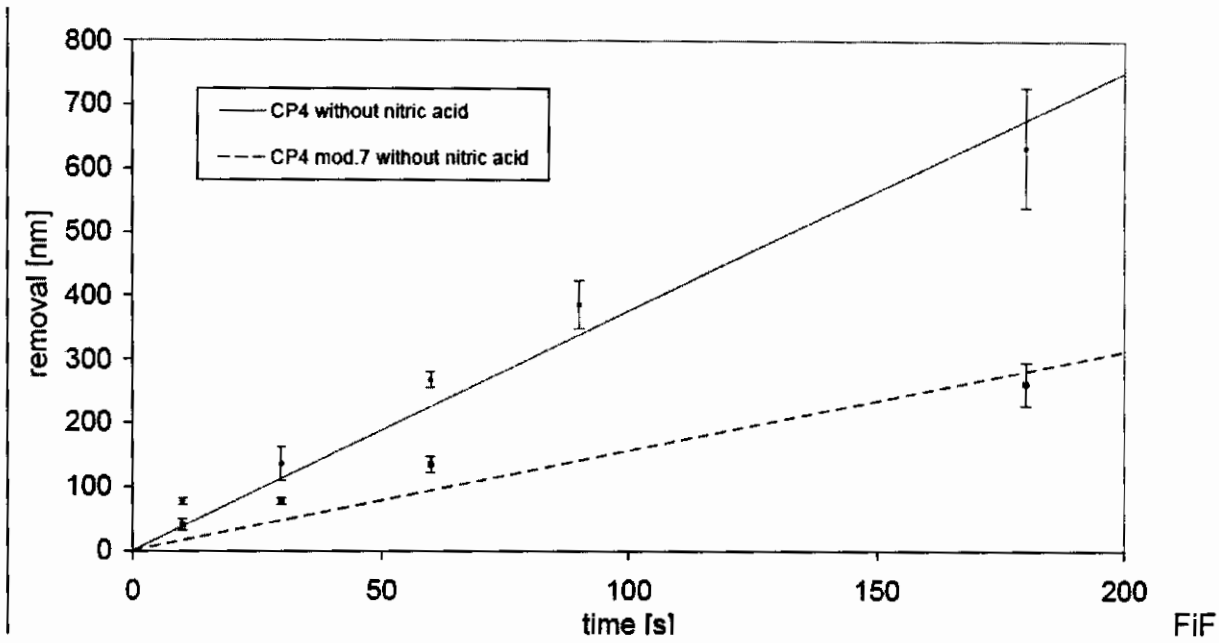


Figure 4: Etch rate (Å/s) on SOI as a function of Br_2 concentration (Molar). The expected Br_2 concentrations (theorical) are reported for each solution depending on its volumic ratios. The experiments were performed at room temperature.

Figure 5:



FiF

igure 5: Removal (in nm) of a piece of SOI as a function of time (s) using a CP4 modified solution in accordance with the present invention (mod.7 corresponding to 1/2/17.5 ratio of HF/HNO3/CH3COOH).

Figure 6:

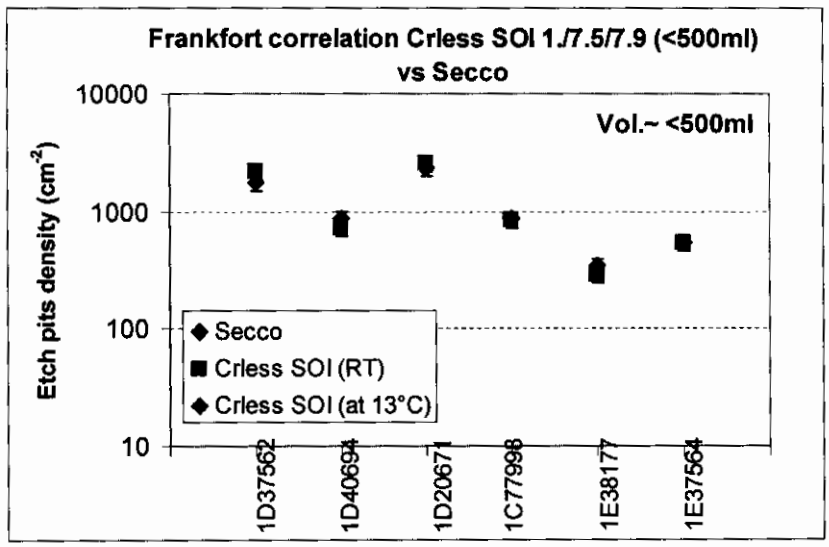


Figure 6: Etch pits density (cm^{-2}) for different pieces of SOI wafers after etching in accordance with the present invention and Secco etching, at room temperature.

Figure 7

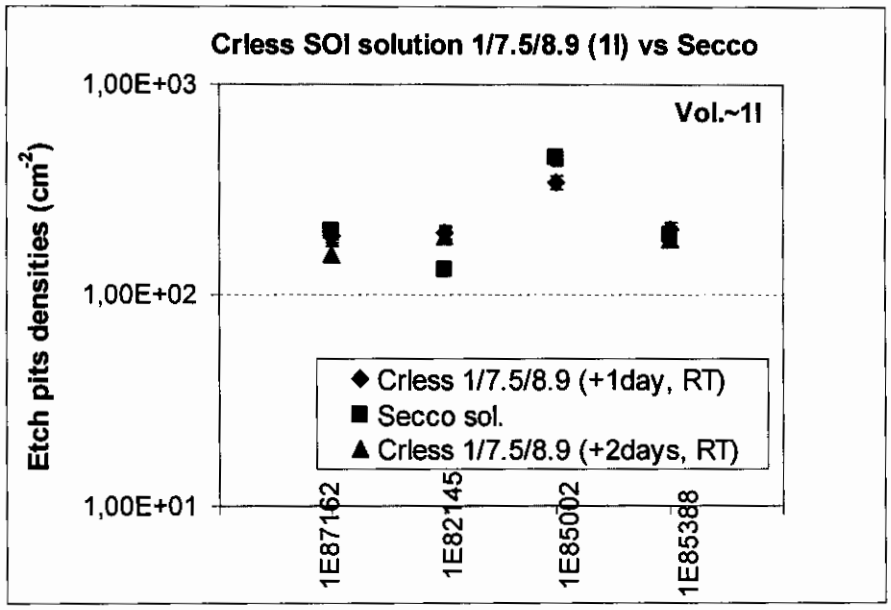


Figure 7: Etch pits density (cm^{-2}) for different pieces of SOI wafers after etching in accordance with the present invention (volume ~ 1liter) and Secco etching, at room temperature.

Figure 8

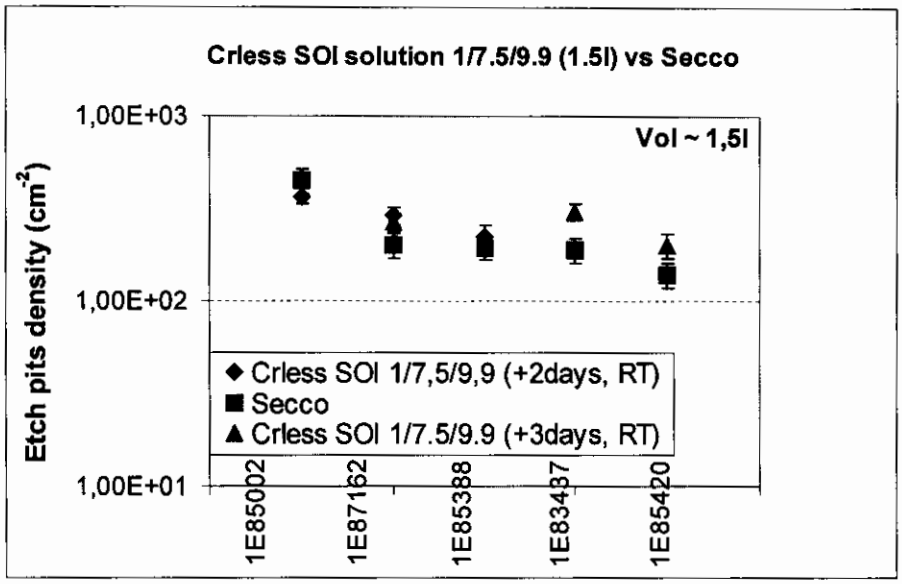


Figure 8: Etch pits density (cm^{-2}) for different pieces of SOI wafers after etching in accordance with the present invention (volume ~ 1.5 liters) and Secco etching, at room temperature.

Figure 9

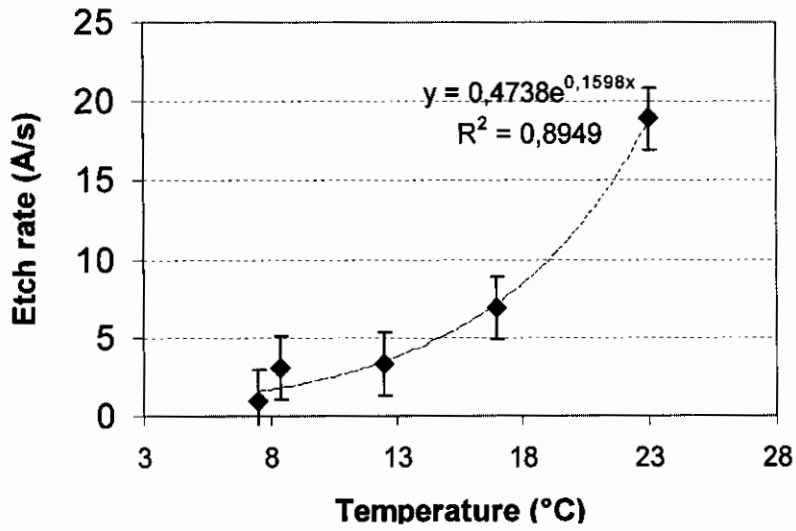


Figure 9: Evolution of the etch rate (Å/s) as a function of the temperature (from room temperature down to 5°C) for an etching solution of the present invention.

Figure 10:

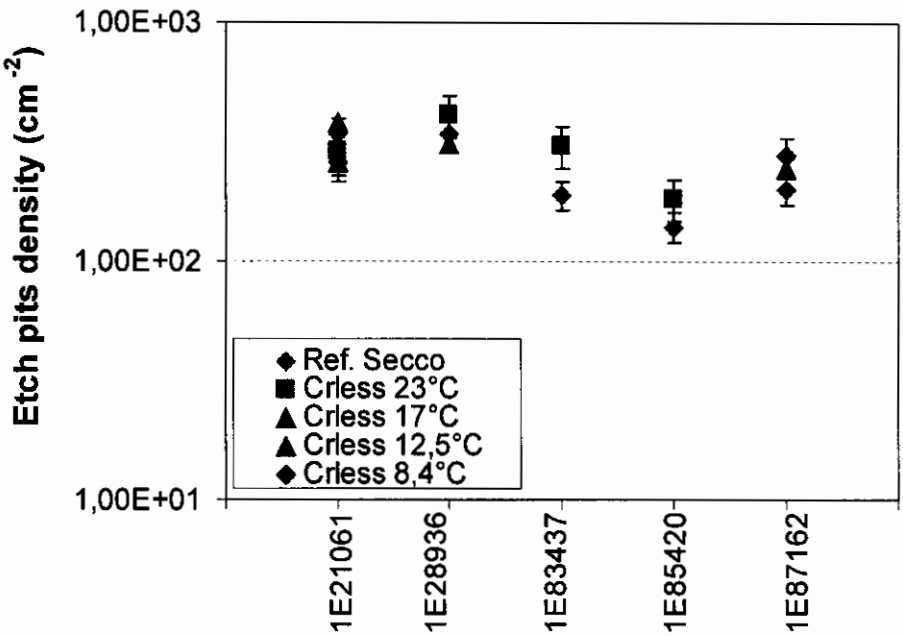


Figure 10: Etch pits density (cm-2) for different pieces of SOI wafers after etching at different temperature (from room temperature down to 8°C) in accordance with the present invention and Secco etching at room temperature.