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(54) **Title:** REDUCTION OF WATERMARKS IN HF TREATMENTS OF SEMICONDUCTING SUBSTRATES

(57) **Abstract:** The present invention relates to processes of cleaning and preparing hydrophobic surfaces of semiconductor substrates, wherein the said semiconductor substrates are suitable for use as base substrates for epitaxial growth. In the context of cleaning the substrate with an aqueous solution containing hydrofluoric acid (HF), a strong acid with a pKa of less than 3 may be used in combination with the HF and/or rinsing whilst applying megasonic waves may be performed. The processes according to the invention allow hydrophobic surfaces to be prepared showing reduced levels of watermarks.