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# 1970's
# RCA Cleaning

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RCA cleaning was developed by Werner Kern around 1965 and was published in the 1970 issue of RCA Review [1]. They are two types of silicon wafer cleaning, SC-1 and SC-2. SC-1 is the cleaning with an aqueous solution of $NH_4OH$ (ammonium hydroxide), HCl (hydrochloric acid) and $H_2O_2$ (hydrogen peroxide), and SC-2 is the cleaning which is added after SC-1 with an aqueous solution of HCl (hydrochloric acid).
Both of them are done in a fused quartz container at a temperature of 75 to 80 ℃. The SC-1 cleaning has the effect of dissolution removal of organic substances and separation and removal of insoluble particles. In addition, the SC-2 cleaning has an effect of removing metal ion contaminants. This RCA cleaning has become the standard of semiconductor cleaning methods and has been widely used by world semiconductor manufacturers for over 40 years.
Semiconductor grade chemicals used for cleaning started to be supplied on the market since the early 1960's. In Japan, it was manufactured and sold by Mitsubishi Gas Chemical, Kanto Chemical Co. and others, A batch type cleaning apparatus which continuously performs RCA cleaning in a multi-vessel equipment was also made commercially available.

References:
【1】W. Kern and D. Puotinen, RCA Review 3, p187 (1970)

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