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The Study of Chemically Ag-Etching at PCB Wet Process
PCB wet공정에서 화학적 은 에칭에 관한 연구

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This study was research about selective Ag etching solution for use with lead frame on the surface of copper. With method that use existent organic compound in etching of silver, method that is electrochemistry and newly integrate solution use. Newly integrate solution uses potassium iodide as the ligand that coordinates to the metal ions and ferricyanide and cyanide as the oxidant. As the result, old organic compound is 10nm/s, newly integrate solution 149nm/s, and electrochemistry be that method by 161nm/s the etching speed most fast. But, phenomenon that side etching of method is serious of electrochemistry method appeared. While, side etching of integrate solution did not appear almost newly and the etching speed showed excellently. This etching rate was depended on the concentration of co-ligands and time. But the etching rate wasn't depended on the pH(2~6), and oxidant ($K_3Fe(CN)_6$).