**METHOD FOR FORMING MULTI-LAYER BUMPS ON A SUBSTRATE**

**Abstract of the Invention**

A method for forming multi-layer bumps on a substrate includes depositing a first metal powder on the substrate, and selectively melting or reflowing a portion of the first metal powder to form first bumps. A second metal powder is then deposited on the first bumps, and melted to form second bumps on the first bumps. A masking plate is disposed over the substrate to select the portions of the metal powders that are melted and the metal powders are melted via an irradiation beam. The multi-layer bump is formed without the need for any wet chemicals.

Fig. 1