

ELECTROPLATING METHODS FOR SEMICONDUCTOR SUBSTRATES

ABSTRACT OF THE DISCLOSURE

5 A non-uniform initial metal film is non-uniformly depleted to provide a more
uniform metal film on a substrate. Electrochemical deplating may be performed by
placing the substrate in a deplating bath formulated specifically for deplating, rather
than for plating. The deplating bath may have a throwing power of 0.3 or less; or a bath
conductivity of 1 mS/cm to 250 mS/cm. Reverse electrical current conducted through
10 the deplating bath non-uniformly. electro-etches or deplates the metal film.

FIG. 1