ABSTRACT

CARBON NANOTUBE CONTACT STRUCTURES

A carbon nanotube contact structure (1400) can be used for making pressure connections to a DUT The contact structure can be formed using a carbon nanotube film (1100) or with carbon nanotubes in solution The carbon nanotube film can be grown in a trench in a sacrificial substrate in which a contact structure such as a beam or contact element (1403) is then formed by metal plating The film can also be formed on a contact element and have metal posts dispersed therein to provide rigidity and elasticity Contact structures or portions thereof can also be plated with a solution containing carbon nanotubes The resulting contact structure can be tough, and can provide good electrical conductivity.

FIG. 14