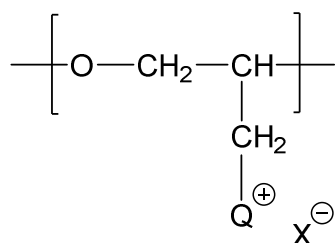


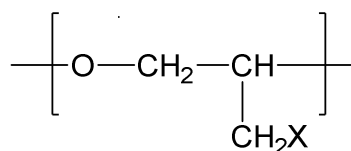
LEVELER COMPOSITIONS FOR USE IN COPPER DEPOSITION IN MANUFACTURE OF MICROELECTRONICS

ABSTRACT

An aqueous electrolytic composition and a process for electrodeposition of copper on a dielectric or semiconductor base structure using the aqueous electrolytic composition. The process includes (i) contacting a metalizing substrate comprising a seminal conductive layer on the base structure with an aqueous electrolytic deposition composition; and (ii) supplying electrical current to the electrolytic deposition composition to deposit copper on the substrate. The aqueous electrolytic composition comprises: (a) copper ions; (b) an acid; (c) a suppressor; and (d) a quaternized poly(epihalohydrin) comprising n repeating units corresponding to structure 1N and p repeating units corresponding to structure 1P:



(1N)



(1P)

[Figure 1]