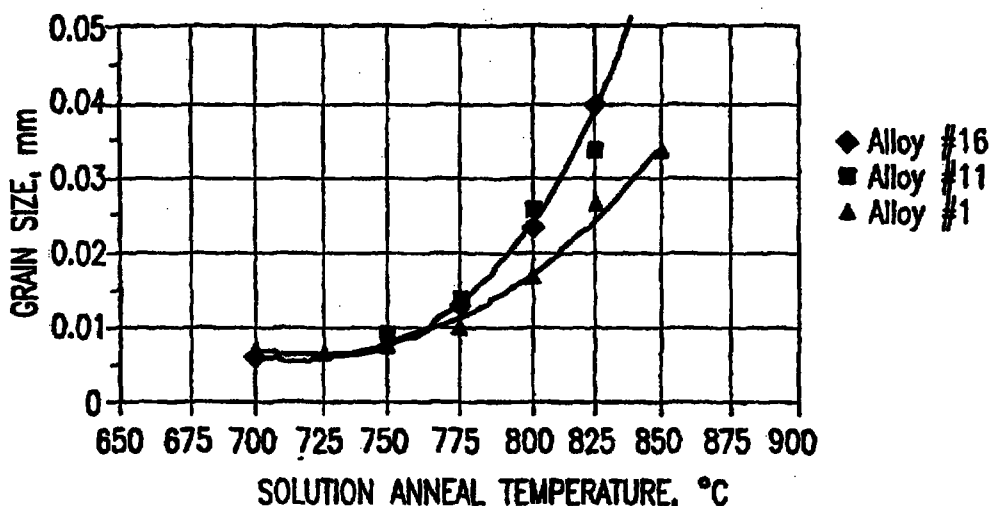




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(54) Title: COPPER ALLOY WITH IMPROVED RESISTANCE TO CRACKING



(57) Abstract

A copper alloy having improved resistance to cracking due to localized plastic deformation and the process of making it. The alloy consists essentially of: from 0.7 to 3.5 weight percent nickel; from 0.2 to 1 weight percent silicon; from 0.05 to 1 weight percent tin; from 0.26 to 1 weight percent iron; and the balance copper and unavoidable impurities. The copper alloy has a local ductility index of greater than 0.7 and a tensile elongation exceeding 5 %. Cobalt may be substituted for iron, in whole or in part, on a 1:1 basis by weight. The alloy is precipitation hardenable and useful for electronic applications, including without limitation, connectors.