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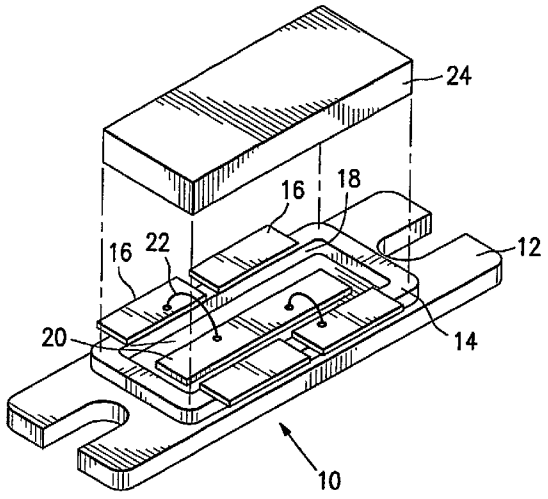
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(54) Title: SEMICONDUCTOR PACKAGE HAVING FILLER METAL OF GOLD/SILVER/COPPER ALLOY



(57) Abstract: A semiconductor package to which a potential difference is applied has two or more of the components thereof bound together using a filler metal. The filler metal is a solid solution structure in which the metallic components are atomically dispersed, and may comprise an alloy of gold, silver and copper. A preferred form of the filler metal comprises 60Au20Ag20Cu. Such filler metals in accordance with the invention provide the advantages of silver-based filler metals without the silver migration that leads to eventual shorting of the semiconductor package. When water condenses to form a continuous layer thereof within the semiconductor package due to moisture seeping into the package and temperature changes, the silver within the filler metal does not ionize, and therefore a buildup of silver deposits and eventual shorting of the package does not occur.

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