

A Solution to Tin Whisker-related Failures in Electronic Systems

Challenge

Tin whiskering is an unwanted growth of hair-like filaments from tin or tin-based solder materials, has long been a challenge in the electronics industry, leads to short circuits, current leakage, and other electrical failures.

Solution

This invention provides a technology-based solution to eliminate the risk of tin-whisker-related failures. This groundbreaking solution to tin whiskering features an innovative Sn-In electroplating bath that is Pb-free, environmentally safe, and operates at room temperature. This advanced treatment does not require any changes to existing plating assemblies, making it easy to implement in your current process. manufacturing method that prevents superalloys from cracking.

Benefits and Features

- Effectively eliminates the risk of tin-whisker-related failures, enhancing the dependability of electronic devices and systems.
- Extends the lifespan of electronic components by reducing the need for costly replacement and repairs due to whisker-related failures.



Market Potential / Applications

This invention has applications in diverse industries, including consumer electronics, automotive, aerospace and defense, telecommunications, medical devices, industrial automation, and semiconductor manufacturing.

Developments and Licensing Status

Status: Available Commercial sponsor sought? Yes

Patent Status

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Inventors

Bhaskar Majumdar; Sherin Bhassayvantha, Luke Soule

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To inquire about this technology call (575) 835-5390 or email us at <u>OIC@nmt.edu</u> <u>https://www.nmt.edu/oic/</u>