# PLASTIC HEAT SINK MADE OF POLYMER NANOCOMPOSITE TO PREVENT HEAT RELATED FAILURES IN ELECTRONIC DEVICES

## TECHNOLOGY OVERVIEW

The invention provides a cost effective injection mouldable plastic heat sink that displays excellent thermal conductivity, mechanical strength and electrical resistance. The heat sink is made of polymer which are used in manufacturing industries for a variety of products. Thus, no particular requirement for new equipment or tools to fabricate. The developed heat sink can be fabricated into custom designed products of varying size and shape. It is light in weight and provides mechanical support to the electronic component and/or devices with tunable thermal, electrical and mechanical properties.

## POTENTIAL APPLICATIONS

The invented product can be used in a variety of applications:

(i) Heat sink
(ii) LED lamp holder
(iii) Device casing
(iv) High power battery casing
(v) Aircraft and automobile structure components

## MARKET OPPORTUNITIES

- Aerospace
- Defense
- Electronic
- Automobile
- Marine and Offshore
- Oil and Gas
- Construction

## COMMERCIALISATION

The product is available for licensing.

## CONTACT DETAILS

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Figure 1 Fabrication of Plastic Heat Sink

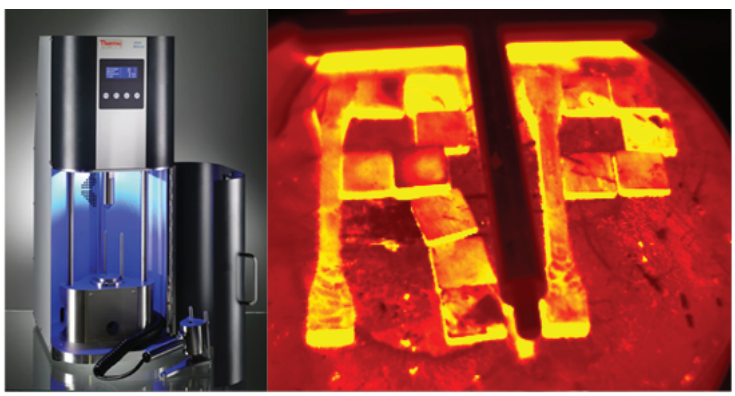

Figure 2 Injection Moulded Plastic Heat Sink

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- Visual Sentiment Analytics for Social Media Analysis
- Wireless Proximity Sensing for Safety and Security Applications
- Wireless Stress Monitoring System
- Portable Hydrogen Generator and Low Cost Hydrogen Fuel Cell System Development
- All-Solid-State Lithium Ion Thin Film Micro Battery
- Cloud-based Logistics Tracking

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