

**Docket #:** S05-426

# **Composite Thermal Interface Material Including Aligned Nanofibers**

## **Applications**

- Electronics
- Optics
- Aerospace

## **Advantages**

- **Increased thermal performance** - orders of magnitude improvement due to:
  - high thermal conductivity of aligned carbon nanotubes
  - minimized contact resistance
- **Compliant** - conforms to nanofiber and substrate topographies
- **Variety of possible geometries**

## **Publications**

- Panzer, M.; Zhang, G.; Mann, D.; Hu, X.; Pop, E.; Dai, H.; Goodson, K.E.; "Thermal Properties of Metal-Coated Vertically-Aligned Single Wall Nanotube Films", Thermal and Thermomechanical Phenomena in Electronics Systems, 30 May-2 June 2006, pages 1306 - 1313.

## **Patents**

- Published Application: [20090068387](#)
- Issued: [8,389,119 \(USA\)](#)

## **Innovators**

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