

Close-Proximity Indirect-Exposure Atmospheric-Pressure Plasma Processing of Polymeric Materials.

Disclosure Number

201102626

Technology Summary

The present invention comprises a method and associated apparatus for the treatment of polymeric materials, specifically, 1) in the stabilization and oxidation of thermoplastic materials for the preparation of high temperature processing and 2) the surface treatment of polymeric carbonized materials for the improvement of mechanical properties of composite materials derived from these materials. The device and process are expected to considerably reduce the required oxidation time during the manufacturing (conversion) of any type of precursor into carbon fibers.

Inventor

PAULAUSKAS, FELIX L

Materials Science and Technology Div

Licensing Contact

DETRANA, ALEXANDER G

UT-Battelle, LLC

Oak Ridge National Laboratory

Rm 139, Bldg 4500N, MS: 6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 576-9682

E-mail: DETRANAAG@ORNL.GOV

Note: The technology described above is an early stage opportunity. Licensing rights to this intellectual property may be limited or unavailable. Patent applications directed towards this invention may not have been filed with any patent office.