

Low Cost, Multilayer, Highly Transparent and Thermally Insulating Hybrid Silica-Polymer Film

Disclosure Number

201503608

Technology Summary

The invention relates to materials and more specifically to materials that provide thermal insulation of windows with improved anti-condensation properties. The material is useful for applications such as self-cleaning refrigerator surfaces, self-cleaning and highly thermally insulating glass, and condensation resistant power lines and airplanes wings, energy efficient vehicle windows, anti-fogging eye glasses, anti-fogging helmets, warm blankets, quilts, and clothes. The main advantage of technology is lower cost, scalability, and use of earth abundant material, compared to current competing technologies.

Inventor

SHARMA, JASWINDER K
Energy & Transportation Science Division

Licensing Contact

SIMS, DAVID L
UT-Battelle, LLC
Oak Ridge National Laboratory
Rm 124C, Bldg 4500N6196
1 Bethel Valley Road
Oak Ridge, TN 37831

Office Phone: (865) 241-3808

E-Mail: SIMSDL@ORNL.GOV