

Superhydrophobic Anodized Alumina and Method of Making Same

Disclosure Number

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Technology Summary

The invention relates to surface treatments and more specifically to methods for modifying a standard aluminum anodization process in such a way as to produce a durable superhydrophobic surface. The resulting superhydrophobic anodized alumina surface can also be customized to have a variety of unique and commercially valuable characteristics. For example, this superhydrophobic alumina surface can be made to exhibit anti-biofouling, anti-icing, or drag reducing characteristics, or a combination of each. In addition, the superhydrophobic anodized aluminum can be made into self-cleaning mirrors for use in telescopes and concentrated solar power applications.

Inventor

SIMPSON, JOHN T

Measurement Science & Systems Engr 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

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