

## 2013-J1688

LEGISLATIVE RESOLUTION honoring the Eastern New York Intellectual Property Law Association's Inventors of the Year

WHEREAS, The State of New York takes great pride in acknowledging its esteemed residents who have distinguished themselves in their profession; and

WHEREAS, The Eastern New York Intellectual Property Law Association will honor Bernard Patrick Bewlay, Brian Michael Ellis, Michael Francis Xavier Gigliotti, Thomas Joseph Kelly, Mohamed Rahmane, Stephen Francis Rutkowski, Michael James Weimer, and Joseph Carl Wukusick as its Inventors of the Year during a dinner to be held at the Century House on May 23, 2013; and

WHEREAS, These distinguished gentlemen are being recognized for US Patent No. 8,048,365, issued on November 1, 2011, entitled Crucibles for Melting Titanium Alloys; and

WHEREAS, Turbine engine designers are continuously looking for new materials with improved properties for reducing engine weight and obtaining higher engine operating temperatures; and

WHEREAS, Titanium alloys, especially titanium aluminide (TiAl)-based alloys, possess a promising combination of low-temperature mechanical properties as well as high intermediate temperature strength and creep resistance; and

WHEREAS, For those reasons, TiAl-based alloys have the potential to replace nickel-based super-alloys, which are currently used to make numerous turbine engine components; and

WHEREAS, One method used to make turbine engine components, such as airfoils, is vacuum induction melting, which generally involves heating a metal in a crucible made from a non-conductive refractory alloy oxide until the charge of the metal within the crucible is melted down to

liquid form; and

WHEREAS, Cold wall or graphite crucibles are generally used to prevent thermal stress on the crucible, which may cause cracking; cracking may lead to a reduction in crucible life and inclusions in the component being cast; and

WHEREAS, Difficulties may also arise when melting highly reactive alloys, such as TiAl, and cold crucible melting also has a number of technical and economic limitations; and

WHEREAS, There is, therefore, a great need for ceramic crucibles for use in melting highly reactive alloys that are less likely to contaminate the alloy and pose fewer technical and economic limitations than current applications; and

WHEREAS, The State of New York is pleased to join the Eastern New York Intellectual Property Law Association in recognizing these extraordinary men for their valuable invention; now, therefore, be it

RESOLVED, That this Legislative Body pause in its deliberations to honor the Eastern New York Intellectual Property Law Association's Inventors of the Year; and be it further

RESOLVED, That copies of this Resolution, suitably engrossed, be transmitted to the Eastern New York Intellectual Property Law Association.