

Castable High-Temperature Ce-Modified Al Alloys

Disclosure Number

201503469

Technology Summary

The present invention comprises castable Ce-modified Al alloys that have the ability to fill a vacant spot in the aluminum alloys family. The alloy maintains its mechanical properties to a higher temperature than currently available alloys and thus create a high temperature aluminum alloy with mechanical characteristic improvements upwards of 30% over other Al alloys in similar high temperature applications. Cerium modification of Aluminum alloys will serve to create an as of yet unseen opportunity for Aluminum alloys to be utilized in high temperature applications; where before, such and application was limited to much denser and thus heavier alloys.

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