

Creep-Resistant, Cobalt-Containing Alloys for High Temperature, Liquid-Salt Heat Exchanger Systems

Disclosure Number

201202934

Technology Summary

This invention outlines new high temperature alloys that can be used in contact with liquid fluorides. These alloys have much better creep resistance than existing alloy such as Alloy N. The alloys of the present invention can be potentially applied in high temperature heat exchangers in nuclear reactors, concentrated solar power systems, and industrial heat exchanger applications. This particular set of alloys contain cobalt and can only be used in applications where cobalt is not detrimental. These alloys have been specifically designed to be used at temperatures greater than 700 °C.

Inventor

MURALIDHARAN, GOVINDARAJAN
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.