

Task Specific Ionic Liquid Extractive Metallurgy of Rare Earth Minerals

Disclosure Number

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Technology Summary

This extractive metallurgy invention dissolves rare earth element containing minerals important in the United States as well as metal oxides and metal carbonates. Direct contact between rare earth minerals of interest and the invented materials may be performed, resulting in an enrichment of the medium and heavy rare earth elements, thus allowing for an attractive pre-concentration process. In this metallurgical process, the primary constituents (La, Ce, Nd) may be effectively separated from minor constituents (Eu, Tb, Dy, Ho, Y).

Inventor

LUO, HUIMIN
Energy & Transportation Science Division

Licensing Contact

CALDWELL, JENNIFER T

UT-Battelle, LLC

Oak Ridge National Laboratory

Rm 137, Bldg 4500N6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 574-4180

E-Mail: CALDWELLJT@ORNL.GOV