

Working with NREL - Commercialization



Presented to

**22nd Industry Growth
Forum**

**November 5, 2009
Denver, CO**

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EERE Technology Portal



U.S. Department of Energy
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Facilitating Commercial Access to Climate-friendly Intellectual Property

New technology related to energy efficiency and low carbon energy sources offer one of America's best hopes for reducing global warming and establishing energy independence. The EERE Intellectual Property Portal is designed to facilitate access to these climate-friendly technologies and jumpstart commercial enterprises that can leverage them.

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Solar Energy Technologies

The Solar Energy Technologies Program focuses on developing cost-effective solar-energy technologies that have the greatest potential to benefit the nation and the world. Solar technologies diversify the energy supply, reduce the country's dependence on imported fuels, improve air quality, and offset greenhouse gas emissions. A growing solar industry also stimulates our economy by creating jobs in solar manufacturing and installation.

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Featured Technologies



Preparation of Superconductor Precursor Powders

A process for the preparation of a precursor metallic powder composition for use in the subsequent formation of a superconductor. The process involves an electrodeposition bath in an electrolyte medium and a cathode substrate electrode, and providing to the bath soluble salts of metals capable of exhibiting superconductor properties.

APPLICATIONS AND INDUSTRIES

- Electrodeposition
- Superconductor
- Power Storage
- Electric Motors

INVENTOR:
Raghu N. Bhattacharya

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Two Chamber Reaction Furnace


A vertical two chamber reaction furnace. The furnace has a lower chamber with an independently operable means of heating the lower chamber and a gas inlet for admitting a gas to create an ambient atmosphere. It also has an upper chamber which can be independently heated. Between the lower chamber and the upper chamber is a vapor permeable diffusion partition.

APPLICATIONS AND INDUSTRIES

- Material Processing
- Ore Refinery
- Manufacturing

INVENTOR:
Richard D. Blaugher

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Clean Fractionation

This is a process for upgrading biomass feedstocks for a biorefinery by separating the cellulose, hemicellulose, and lignin into pure streams for conversion into value-added products. The technology improves extraction efficiency, reduces conversion times and increases yields.


APPLICATIONS AND INDUSTRIES

- Ethanol
- Pulp and paper
- Chemical
- Food processing
- Fuels

INVENTOR:
National Renewable Energy Lab

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Biomass

Searches Title, Abstract, Claims, and Description simultaneously.

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Ethanol


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Biomass

Biomass is a clean, renewable energy source that can help to significantly diversify transportation fuels in the United States. The Biomass Program is helping transform the nation's renewable and abundant biomass resources into cost competitive, high performance biofuels, bioproducts, and biopower. This is dummy text for the Browse Available Technologies section of the EERE Intellectual Property portal.


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Building Technologies

The Building Technologies Program partners with states, industry, and manufacturers to improve the energy efficiency of new and existing buildings. This is dummy text for the Browse Available Technologies section of the EERE Intellectual Property portal. This is dummy text for the Browse Available Technologies section of the EERE Intellectual Property portal.


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Geothermal Technologies

EERE's Geothermal Technologies Program works in partnership with U.S. industry to establish geothermal energy as an economically competitive contributor to the U.S. energy supply. This is dummy text for the Browse Available Technologies section of the EERE Intellectual Property portal. This is dummy text for the Browse Available Technologies section of the EERE Intellectual Property portal.

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Working with NREL

Cooperative Research and Development Agreements (CRADA): Used when a partner and the lab intend to collaborate on a project. It protects a company's and NREL's existing intellectual property, and allows the company to negotiate for an exclusive field-of-use license to subject inventions that arise during the CRADA's execution. These projects can involve co-funding with DOE or be completely funded by the partner.

Work-for-Others Agreements: Used when a partner seeks technical services to complete a project but does not intend to perform joint research. The partner provides NREL with the necessary resources and fully covers the costs of the work to be performed.

Licenses: Copyright, trademark or Patent licenses to existing NREL intellectual property. All business terms are negotiable; agreements must include some DOE required terms.

Technical Assistance Projects (new): Small projects with technology-based companies to improve their competitiveness. Limited free assistance or information to help businesses with specific technology questions. Requires a direct match between the company need and the capabilities available at NREL.



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