Technology Licensing Opportunity

Non-Confidential Summary

Novel process for Biodiesel Production with Value Added Byproducts

ROI# 05-002

Opportunity:
The current method utilizes a low cost glycerol in the production of high value lithium grease.

Background:
Biodiesel is regarded as an environment friendly alternative fuel to petroleum gas. The global biodiesel production in 2007 was over 4 billion liters and is estimated to reach 10 billion liters by 2010. However, the biodiesel industry has been highly dependent on governmental subsidies due to its relatively high production costs. Approaches that can increase the financial output of the biodiesel production process can help the biodiesel manufacturers become financially sustainable.

Invention:
This technology produces alkyl esters as well as desalted glycerol and lithium grease. Glycerin produced from this process is substantially free of salt and base, which makes it a more refined product for industry applications. The lithium grease from the process may be used as an ingredient in water resistant grease products. The total output value from this novel process would be increased by about 60% compared to the conventional industry process.

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Researcher profile:

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Selected patents

1. Fuel Additive Composition to Improve Fuel Lubricity (US patent application No. 12/263,749; Canadian patent application No. 2,642,697)
2. Recovery of Hydrophobic Peptides from Oils (PCT/CA2008/002272)
3. Process for the Production of Polyol Base Catalysts (PCT/CA2008/002091)

Patent Status:

US Patent Application No. 12/158,883
Canadian Patent Application No. 2,634,819 (Priority date: 21/12/2006)

Development Stage:

University laboratory

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