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| PATENT ASSIGNMENT COVER SHEET |
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| Property Type | Number |
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Invention Title: PRODUCTION OF LEVULINIC ACID, FURFURAL, AND GAMMA VALEROLACTONE FROM C5 AND C6 CARBOHYDRATES IN MONO- AND BIPHASIC SYSTEMS USING GAMMA-VALEROLACTONE AS A SOLVENT

Inventor(s): James Dumesic, Elif Gurbuz, Stephanie Wettstein, David Alonso

U.S. Filing/Issue Date: April 12, 2012

Patent or Application Serial No.: 13/445643

Grant/Contract Number(s): US Department of Energy DE-FC02-07ER64494, ARMY/ARO W911NF-09-2-0010

Foreign Applications filed/intended in (countries):

The invention identified above is a Subject Invention under **35 U.S.C. 200, et seq.**, and the Standard Patent Rights clause at **37 CFR 401.14, FAR 52.227-11** or **FAR 52.227-12** (if applicable) which are included among the terms of the above identified grant or contract award from the United State Government. This document is confirmatory of:

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Signed this 23 April, 2012,

By Michael Falk

(Name of Grantee/Contractor Official)



(Signature)

Title General Counsel

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