U.S. PATENT DOCUMENTS

| | | | |
|---|---|---|---|
| 2007/0068848 | A1 | 3/2007 | Monnier et al. |
| 2007/0131579 | A1 | 6/2007 | Koivusalmi et al. |
| 2007/0135316 | A1 | 6/2007 | Koivusalmi et al. |
| 2007/0135663 | A1 | 6/2007 | Aalto et al. |
| 2007/0135669 | A1 | 6/2007 | Koivusalmi et al. |
| 2007/0161832 | A1 | 7/2007 | Myllyoja et al. |
| 2007/0170091 | A1 | 7/2007 | Monnier et al. |
| 2007/0175795 | A1 | 8/2007 | Yao et al. |
| 2007/0260102 | A1 | 11/2007 | Duarte Santiago et al. |
| 2007/0281875 | A1 | 12/2007 | Scheibel et al. |
| 2007/0287873 | A1 | 12/2007 | Coupard et al. |
| 2007/0299291 | A1 | 12/2007 | Koivusalmi |
| 2008/0025903 | A1 | 1/2008 | Cortright |
| 2008/0033188 | A1 | 2/2008 | Dumesic et al. |
| 2008/0045731 | A1 | 2/2008 | Zhang |
| 2008/0050792 | A1 | 2/2008 | Zmierczak et al. |
| 2008/0052983 | A1 | 3/2008 | Aulich et al. |
| 2008/0053870 | A1 | 3/2008 | Marker et al. |
| 2008/0066374 | A1 | 3/2008 | Herskowitz |
| 2008/0076945 | A1 | 3/2008 | Marker et al. |
| 2008/0092436 | A1 | 4/2008 | Seames et al. |
| 2008/0132435 | A1 | 6/2008 | Ferreira Fontes et al. |
| 2008/0156694 | A1 | 7/2008 | Chapus et al. |
| 2008/0161614 | A1 | 7/2008 | Bertoncini et al. |
| 2008/0161615 | A1 | 7/2008 | Chapus et al. |
| 2008/0163543 | A1 | 7/2008 | Abhari et al. |
| 2008/0173570 | A1 | 7/2008 | Marchand et al. |
| 2008/0216391 | A1 | 9/2008 | Cortright et al. |
| 2008/0229654 | A1 | 9/2008 | Bradin |
| 2008/0244962 | A1 | 10/2008 | Abhari et al. |
| 2008/0281134 | A1 | 11/2008 | Ghonasgi et al. |
| 2008/0300434 | A1 | 12/2008 | Cortright et al. |
| 2008/0300435 | A1 | 12/2008 | Cortright et al. |
| 2008/0302001 | A1 | 12/2008 | Koivusalmi et al. |
| 2008/0308457 | A1 | 12/2008 | Dindi et al. |
| 2008/0308458 | A1 | 12/2008 | Dindi et al. |
| 2008/0312480 | A1 | 12/2008 | Dindi et al. |
| 2008/0313955 | A1 | 12/2008 | Silva et al. |
| 2009/0014354 | A1 | 1/2009 | Knuuttila et al. |
| 2009/0019763 | A1 | 1/2009 | Ghonasgi et al. |
| 2009/0029427 | A1 | 1/2009 | Miller |
| 2009/0031617 | A1 | 2/2009 | O'Rear |
| 2009/0062578 | A1 | 3/2009 | Koivusalmi et al. |
| 2009/0069610 | A1 | 3/2009 | Roberts, IV et al. |
| 2009/0071872 | A1 | 3/2009 | Ginosar et al. |
| 2009/0077866 | A1 | 3/2009 | Kalnes et al. |
| 2009/0082606 | A1 | 3/2009 | Marker et al. |
| 2009/0084026 | A1 | 4/2009 | Miller |
| 2009/0088351 | A1 | 4/2009 | Miller |
| 2009/0107033 | A1 | 4/2009 | Gudde et al. |
| 2009/0124839 | A1 | 5/2009 | Dumesic et al. |
| 2009/0126260 | A1 | 5/2009 | Aravanis et al. |
| 2009/0250376 | A1 | 10/2009 | Brandvold et al. |
| 2009/0253947 | A1 | 10/2009 | Brandvold et al. |
| 2009/0294324 | A1 | 12/2009 | Brandvold et al. |
| 2009/0301930 | A1 | 12/2009 | Brandvold et al. |

FOREIGN PATENT DOCUMENTS

| | | | |
|---|---|---|---|
| CN | 11343552 | A | 1/2009 |
| EP | 1719811 | A1 | 8/2006 |
| EP | 2046917 | | 1/2008 |
| WO | 2007063874 | A1 | 6/2007 |
| WO | 2007064015 | A1 | 6/2007 |
| WO | 2007064019 | A1 | 6/2007 |
| WO | WO 2007/064019 | A1 | 6/2007 |
| WO | WO 2007063874 | A1 | 6/2007 |
| WO | WO 2007064015 | A1 | 6/2007 |
| WO | 2007125332 | A1 | 11/2007 |
| WO | WO 2007/125332 | A1 | 11/2007 |
| WO | 2007141293 | A1 | 12/2007 |
| WO | WO 2007/141293 | A1 | 12/2007 |
| WO | 2008012415 | A2 | 1/2008 |
| WO | WO 2008/012415 | A2 | 1/2008 |
| WO | 2008020048 | A2 | 2/2008 |
| WO | WO 2008/020048 | A2 | 2/2008 |
| WO | 2008053284 | A1 | 5/2008 |
| WO | WO 2008/053284 | A1 | 5/2008 |
| WO | 2008101945 | A1 | 8/2008 |
| WO | WO 2008/101945 | A1 | 8/2008 |
| WO | 2008105518 | A1 | 9/2008 |
| WO | 2008119895 | A2 | 9/2008 |
| WO | WO 2008/105518 | A1 | 9/2008 |
| WO | WO 2008/119895 | A2 | 9/2008 |
| WO | 2008141830 | A1 | 11/2008 |
| WO | 2008141831 | A1 | 11/2008 |
| WO | WO 2008/141830 | A1 | 11/2008 |
| WO | WO 2008/141831 | A1 | 11/2008 |
| WO | 2008151792 | A1 | 12/2008 |
| WO | 2008152199 | A1 | 12/2008 |
| WO | WO 2008/151792 | A1 | 12/2008 |
| WO | WO 2008/152199 | A1 | 12/2008 |
| WO | 2009004181 | A2 | 1/2009 |
| WO | 2009011639 | A2 | 1/2009 |
| WO | 2009013233 | A2 | 1/2009 |
| WO | WO 2009/004181 | A2 | 1/2009 |
| WO | WO 2009/011639 | A2 | 1/2009 |
| WO | WO 2009/013233 | A2 | 1/2009 |
| WO | 2009020055 | A1 | 2/2009 |
| WO | 2009025542 | A1 | 2/2009 |
| WO | WO 2009/020055 | A1 | 2/2009 |
| WO | WO 2009/025542 | A1 | 2/2009 |
| WO | 2009059819 | A1 | 5/2009 |
| WO | 2009059920 | A2 | 5/2009 |
| WO | WO 2009/059819 | A1 | 5/2009 |
| WO | WO 2009/059920 | A2 | 5/2009 |

OTHER PUBLICATIONS

Baker, et al. "Catalytic Upgrading of Biomass Pyrolysis Oils" Pacific Northwest Laboratory, Richland, Washington, USA, pp. 883-895.

Elliott, et al. "Hydrotreating Biomass Liquids to Produce . . . ", presented in Washington, D.C., Apr. 7-10, 1986, published by IGT, Chicago: 1987. Chapter 42, pp. 765-784.

Baker, et al. "Technoeconomic Assessment of Direct Biomass Liquefaction to Transportation Fuels", Biomass 22 (1990) pp. 251-269.

Elliott, et al. "Developments in Thermochemical Biomass Conversion." vol. 1, pp. 611-621, Blackie Academic & Professional, London: 1996.

Office Action dated Jun. 21, 2011 for U.S. Appl. No. 12/418,986, Brandvold et al.

Applicant's Sep. 21, 2011 response to the Jun. 21, 2011 Office Action for U.S. Appl. No. 12/418,986, Brandvold et al.

Office Action dated Dec. 12, 2011 for U.S. Appl. No. 12/418,986, Brandvold et al.

Applicant's Mar. 12, 2012 response to the Dec. 12, 2011 Office Action for U.S. Appl. No. 12/418,986, Brandvold et al.

Office Action dated Jun. 16, 2011 for U.S. Appl. No. 12/418,994, Brandvold et al.

Applicant's Sep. 16, 2011 response to the Jun. 16, 2011 Office Action for U.S. Appl. No. 12/418,994, Brandvold et al.

Office Action dated Nov. 29, 2011 for U.S. Appl. No. 12/418,994, Brandvold et al.

Applicant's Feb. 29, 2012 response to the Nov. 29, 2011 Office Action for U.S. Appl. No. 12/418,994, Brandvold et al.

Office Action dated Jun. 16, 2011 for U.S. Appl. No. 12/418,971, Brandvold et al.

Applicant's Sep. 16, 2011 response to the Jun. 16, 2011 Office Action for U.S. Appl. No. 12/418,971, Brandvold et al.

Office Action dated Dec. 1, 2011 for U.S. Appl. No. 12/418,971, Brandvold et al.

Applicant's Feb. 29, 2011 response to the Dec. 1, 2011 Office Action for U.S. Appl. No. 12/418,971, Brandvold et al.

Office Action dated Jun. 16, 2011 for U.S. Appl. No. 12/418,963, Brandvold et al.

Applicant's Sep. 16, 2011 response to the Jun. 16, 2011 Office Action for U.S. Appl. No. 12/418,963, Brandvold et al.

Office Action dated Nov. 30, 2011 for U.S. Appl. No. 12/418,963, Brandvold et al.

Applicant's Feb. 29, 2012 response to the Nov. 30, 2011 Office Action for U.S. Appl. No. 12/418,963, Brandvold et al.