

## List of Patent Applications and Patents

### I. United States Patents and Applications

#### **M.I.T. Case No. 8118**

United States of America Patent No. 6946560, Issued September 20, 2005

United States of America Patent No. 7026498, Issued April 11, 2006

United States of America Patent No. 7247731, Issued July 24, 2007

United States of America Patent No. 7560582, Issued July 14, 2009

"Ligands For Metals And Improved Metal-Catalyzed Processes Based Thereon"

United States of America Patent No. 6307087, Issued October 23, 2001

United States of America Patent No. 6395916, Issued May 28, 2002

"New Ligands For Metals And Improved Metal-Catalyzed Processes Based Thereon"

by Stephen L. Buchwald, Ken Kamikawa, David W. Old, Michael Palucki and John P. Wolfe

#### **M.I.T. Case No. 11860**

United States of America Patent No. 7223879, Issued May 29, 2007

"Ligands For Metals And Improved Metal-Catalyzed Processes Based Thereon"

by Stephen L. Buchwald, Xiaohua Huang and Danilo Zim

#### **M.I.T. Case No. 12856**

United States of America Patent No. 7858784, Issued December 28, 2010

"Ligands For Transition-Metal-Catalyzed Cross-Couplings, And Methods Of Use Thereof"

by Stephen L. Buchwald, Brett Palmer. Fors and David Stuary. Surry

### II. International (non-U.S.) Patents and Applications

#### **M.I.T. Case No. 8118**

Canada Serial No. 2509522, Filed December 9, 2003

Germany Patent No. 1354887, Issued April 25, 2007

United Kingdom Patent No. 1354887, Issued April 25, 2007

"Ligands For Metals And Improved Metal-Catalyzed Processes Based Thereon"

by Stephen L. Buchwald, Ken Kamikawa, David W. Old, Michael Palucki and John P. Wolfe

#### **M.I.T. Case No. 11859**

European Patent Convention Patent No. 1354887, Issued April 25, 2007

"Ligands For Metals And Improved Metal-Catalyzed Processes Based Thereon"

Austria Patent No. 1097158, Issued January 25, 2006

Belgium Patent No. 1097158, Issued January 25, 2006

Canada Patent No. 2336691, Issued February 10, 2009

Denmark Patent No. 1097158, Issued January 25, 2006

European Patent Convention Patent No. 1097158, Issued January 25, 2006

France Patent No. 1097158, Issued January 25, 2006

Germany Patent No. 1097158, Issued January 25, 2006

Ireland Patent No. 1097158, Issued January 25, 2006  
Italy Patent No. 1097158, Issued January 25, 2006  
Japan Serial No. 2000-559117, Filed July 9, 1999  
Luxembourg Patent No. 1097158, Issued January 25, 2006  
Netherlands Patent No. 1097158, Issued January 25, 2006  
Poland Patent No. 1097158, Issued January 25, 2006  
Spain Patent No. 1097158, Issued January 25, 2006  
Switzerland Patent No. 1097158, Issued January 25, 2006  
United Kingdom Patent No. 1097158, Issued January 25, 2006  
"Ligands For Metals And Improved Metal-Catalyzed Processes"  
Canada Serial No. 2645101, Filed July 9, 1999  
"Ligands For Metals And Metal-Catalyzed Processes"  
by Jens Ahman, Stephen L. Buchwald, Andrew Chieffi, Ken Kamikawa, David W. Old,  
Michael Palucki, Joseph P. Sadighi, Robert A. Singer and John P. Wolfe

**M.I.T. Case No. 11860**

Canada Serial No. 2509522, Filed December 9, 2003  
China Patent No. 200380109502.8, Issued October 14, 2009  
European Patent Convention Serial No. 03812849.2, Filed December 9, 2003  
Japan Serial No. 2005-508499, Filed December 9, 2003  
"Ligands For Metals And Improved Metal Catalyzed Processes Based Thereon"  
by Stephen L. Buchwald, Xiaohua Huang and Danilo Zim

**M.I.T. Case No. 12856**

Canada Serial No. 2708369, Filed December 12, 2008  
China Serial No. 200880126921.5, Filed December 12, 2008  
European Patent Convention Serial No. 08860439.2, Filed December 12, 2008  
Japan Serial No. 2010-538198, Filed December 12, 2008  
"Ligands For Transition-Metal-Catalyzed Cross-Coupling, And Methods Of Use Thereof"  
India Serial No. 4169/CHENP/2010, Filed December 12, 2008  
"Ligands For Transition-Metal-Catalyzed Cross-Couplings And Methods Of Use Thereof"

**M.I.T. Case No. 15431**

Canada Patent No. 2336691, Issued February 10, 2009  
"Ligands For Metals And Improved Metal-Catalyzed Processes"  
Canada Serial No. 2645101, Filed July 9, 1999  
"Ligands For Metals And Metal-Catalyzed Processes"  
by Jens Ahman, Stephen L. Buchwald, Andrew Chieffi, Ken Kamikawa, David W. Old,  
Michael Palucki, Joseph P. Sadighi, Robert A. Singer, Malisa V. Troutman and John P.  
Wolfe