

Title (en)  
METHOD AND APPARATUS FOR SCREENING CATALYST LIBRARIES

Title (de)  
VERFAHREN UND VORRICHTUNG ZUM SCREENING VON KATALYSATORBIBLIOTHEKEN

Title (fr)  
PROCEDE ET DISPOSITIF PERMETTANT D'EXPLORER DES BIBLIOTHEQUES DE CATALYSEURS

Publication  
**EP 1129348 A1 20010905 (EN)**

Application  
**EP 99954228 A 19991111**

Priority  
• GB 9903767 W 19991111  
• US 19184998 A 19981112

Abstract (en)  
[origin: WO0029844A1] Rapid screening for activities and selectivities of catalyst libraries having addressable test sites is achieved by contacting potential catalysts at the test sites with reactant streams forming product plumes at the addressable test sites. The product plumes are screened by translating a sample probe and/or the library to a position that one addressable site is in proximity to the sampling probe sample orifice and passing a portion of the reaction products through the sampling orifice forming a free jet expanded volume in at least one vacuum stage and passing a portion of the cooled and reduced pressure jet stream through an inlet orifice of a mass spectrometer for analysis. The mass spectrometric analysis may be combined with resonance enhanced multiphoton ionization methods of detection for very rapid library evaluation. Suitable reactors, microreactors, and product transfer sample microprobes for product transfer to a mass spectrometer are disclosed.

IPC 1-7  
**G01N 33/00**; **G01N 31/10**; **G01N 27/62**

IPC 8 full level  
**G01N 27/62** (2006.01); **B01J 19/00** (2006.01); **B01J 37/00** (2006.01); **G01N 1/00** (2006.01); **H01J 49/04** (2006.01); **C40B 30/08** (2006.01); **C40B 40/18** (2006.01)

CPC (source: EP KR)  
**B01J 19/0046** (2013.01 - EP); **G01N 31/10** (2013.01 - KR); **H01J 49/162** (2013.01 - EP); **B01J 2219/00286** (2013.01 - EP); **B01J 2219/00308** (2013.01 - EP); **B01J 2219/0031** (2013.01 - EP); **B01J 2219/00317** (2013.01 - EP); **B01J 2219/00351** (2013.01 - EP); **B01J 2219/00369** (2013.01 - EP); **B01J 2219/00378** (2013.01 - EP); **B01J 2219/00423** (2013.01 - EP); **B01J 2219/005** (2013.01 - EP); **B01J 2219/00585** (2013.01 - EP); **B01J 2219/0059** (2013.01 - EP); **B01J 2219/00596** (2013.01 - EP); **B01J 2219/00653** (2013.01 - EP); **B01J 2219/00659** (2013.01 - EP); **B01J 2219/00704** (2013.01 - EP); **B01J 2219/00745** (2013.01 - EP); **B01J 2219/00747** (2013.01 - EP); **B01J 2219/0075** (2013.01 - EP); **C40B 30/08** (2013.01 - EP); **C40B 40/18** (2013.01 - EP)

Citation (search report)  
See references of WO 0029844A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0029844 A1 20000525**; AU 1064200 A 20000605; BR 9915268 A 20010807; CA 2347697 A1 20000525; CN 1333871 A 20020130; EP 1129348 A1 20010905; ID 29172 A 20010809; JP 2002530647 A 20020917; KR 20010092734 A 20011026; MX PA01004785 A 20020506; NO 20012341 D0 20010511; NO 20012341 L 20010511; NZ 511228 A 20030131; PL 348157 A1 20020506

DOCDB simple family (application)  
**GB 9903767 W 19991111**; AU 1064200 A 19991111; BR 9915268 A 19991111; CA 2347697 A 19991111; CN 99815596 A 19991111; EP 99954228 A 19991111; ID 20011044 A 19991111; JP 2000582796 A 19991111; KR 20017005945 A 20010511; MX PA01004785 A 19991111; NO 20012341 A 20010511; NZ 51122899 A 19991111; PL 34815799 A 19991111