

Title (en)

SUPPORTED CATALYSTS HAVING A CONTROLLED COORDINATION STRUCTURE AND METHODS FOR PREPARING SUCH CATALYSTS

Title (de)

TRÄGERKATALYSATOR MIT GESTEUERTER KOORDINATIONSSTRUKTUR UND VERFAHREN ZUR HERSTELLUNG SOLCHER KATALYSATOREN

Title (fr)

CATALYSEURS SUPPORTES POSSEDENT UNE STRUCTURE DE COORDINATION CONTROLEE ET PROCEDES DE PREPARATION DE CES CATALYSEURS

Publication

EP 1644114 A4 20110615 (EN)

Application

EP 0475557 A 20040617

Priority

- US 2004019439 W 20040617
- US 61890903 A 20030714
- US 61880803 A 20030714

Abstract (en)

[origin: WO2005009611A2] Supported reactive catalysts having a controlled coordination structure and methods for their production are disclosed. The supported catalyst comprises catalyst particles having top or outer layer of atoms in which at least a portion of the atoms exhibit a controlled coordination number of 2. Such catalysts may be manufactured from intermediate precursor compositions that include a control agent in which a preponderance of the molecules are straight-chained rather than branched. The supported catalysts (10) includes a support (12), which initially includes hydroxyl groups on a surface thereof, an anchoring agent (14) chemically bonded to the hydroxyl groups of the support (12) by a condensation reaction and a catalyst particle (6) bonded or attached in some manner (not shown) to the anchoring agent. The supported catalyst of the present invention are useful for the preparation of hydrogen peroxide with high selectivity in addition to other chemical conversion reactions.

IPC 8 full level

B01J 21/18 (2006.01); **B01J 21/16** (2006.01); **B01J 23/38** (2006.01); **B01J 23/40** (2006.01); **B01J 23/44** (2006.01); **B01J 35/00** (2006.01);
B01J 37/02 (2006.01); **C01B 15/01** (2006.01)

CPC (source: EP KR)

B01J 21/00 (2013.01 - KR); **B01J 21/18** (2013.01 - EP); **B01J 23/10** (2013.01 - KR); **B01J 23/16** (2013.01 - EP); **B01J 23/38** (2013.01 - KR);
B01J 23/40 (2013.01 - EP); **B01J 23/44** (2013.01 - EP); **B01J 23/6567** (2013.01 - EP); **B01J 23/70** (2013.01 - EP); **B01J 29/89** (2013.01 - EP);
B01J 31/16 (2013.01 - KR); **B01J 35/393** (2024.01 - EP); **B01J 35/394** (2024.01 - EP); **B01J 37/0203** (2013.01 - EP);
B01J 37/0209 (2013.01 - EP); **B01J 37/0211** (2013.01 - EP); **B01J 37/0213** (2013.01 - EP); **B01J 37/08** (2013.01 - EP);
B01J 37/18 (2013.01 - EP); **C01B 15/029** (2013.01 - EP); **H01M 4/8668** (2013.01 - EP); **H01M 4/921** (2013.01 - EP); **H01M 4/923** (2013.01 - EP);
H01M 4/925 (2013.01 - EP); **H01M 4/926** (2013.01 - EP); **B01J 2229/18** (2013.01 - EP); **H01M 8/1011** (2013.01 - EP);
H01M 2008/1095 (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [XI] WO 03047750 A1 20030612 - ZHOU BING [US], et al
- [XI] EP 1315221 A2 20030528 - BASF AG [DE]
- [XP] WO 03064037 A1 20030807 - ZHOU BING [US], et al
- See references of WO 2005009611A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL HR LT LV MK

DOCDB simple family (publication)

WO 2005009611 A2 20050203; **WO 2005009611 A3 20050317**; BR PI0412538 A 20060919; CA 2532166 A1 20050203;
CA 2532166 C 20120529; EP 1644114 A2 20060412; EP 1644114 A4 20110615; EP 2684603 A1 20140115; HK 1093935 A1 20070316;
JP 2007530248 A 20071101; KR 101168203 B1 20120725; KR 20060034704 A 20060424

DOCDB simple family (application)

US 2004019439 W 20040617; BR PI0412538 A 20040617; CA 2532166 A 20040617; EP 04755557 A 20040617; EP 13187371 A 20040617;
HK 06114277 A 20061229; JP 2006520177 A 20040617; KR 20067000927 A 20040617