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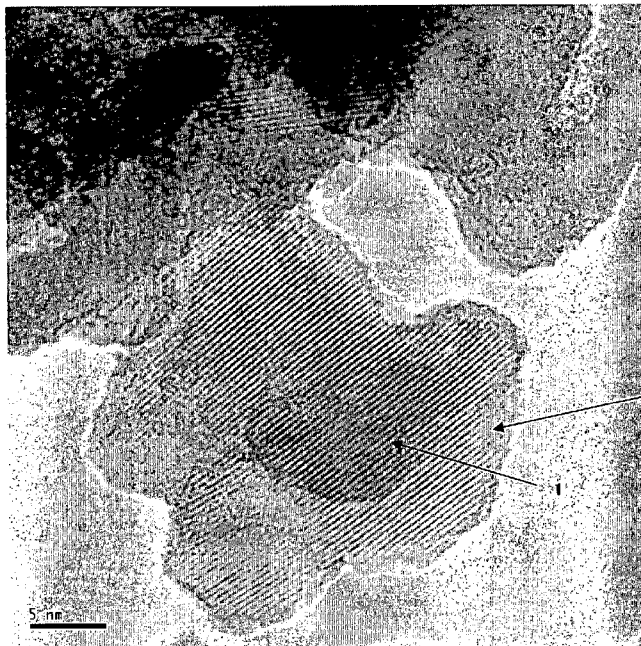
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[Continued on next page]

(54) Title: MOBILE DENOX CATALYST

Figure 1



1. Crystalline phase anatase TiO₂ 2. Amorphous phase enriched in zirconium

(57) Abstract: DeNOx catalysts for the reduction of NOx compounds and porous catalyst support materials are provided. The inventive catalysts comprise an active metal catalyst component and mixed TiO₂/ZrO₂ porous support particles that comprise a) a crystalline phase comprising titanium dioxide and/or a titanium/zirconium mixed oxide, b) an amorphous phase comprising zirconium, and c) a small amount of one or more metal oxide(s) or metalloid oxide(s) deposited on the amorphous outer layer. The inventive catalysts exhibit superior activity and ammonia selectivity.



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International application No.
PCT/US2010/024269**A. CLASSIFICATION OF SUBJECT MATTER****B01J 21/06(2006.01)i, B01J 23/745(2006.01)i, B01J 35/10(2006.01)i, B01J 37/04(2006.01)i, B01D 53/94(2006.01)i, B01D 53/56(2006.01)i**

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: DeNOx, catalyst, titanium, zirconium, oxide, metal, crystal, amorphous

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6706660 B2 (PARK; PAUL W.) 16 March 2004 See the whole document	1-31
A	US 6703343 B2 (PARK; PAUL W.) 09 March 2004 See the whole document	1-31
A	US 6054408 A1 (HUMS; ERICH et al.) 25 April 2000 See the whole document	1-31
A	US 2008-0279740 A1 (AUGUSTINE STEVEN M. et al.) 13 November 2008 See the whole document	1-31
A	WO 2007-078435 A1 (MILLENNIUM INORGANIC CHEMICALS, INC.) 12 July 2007 See the whole document	1-31

 Further documents are listed in the continuation of Box C. See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

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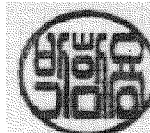
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