US009409155B2

(12) **United States Patent**
Koo et al.

(10) **Patent No.: US 9,409,155 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **METAL STRUCTURE CATALYST AND PREPARATION METHOD THEREOF**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 269 days.

(21) Appl. No.: **13/980,895**

(22) PCT Filed: **Jul. 25, 2012**

(86) PCT No.: **PCT/KR2012/005904**

§ 371 (c)(1),
(2), (4) Date: **Jul. 22, 2013**

(87) PCT Pub. No.: **WO2013/019013**

PCT Pub. Date: **Feb. 7, 2013**

(65) **Prior Publication Data**

US 2013/0309165 A1 Nov. 21, 2013

(30) **Foreign Application Priority Data**

Jul. 29, 2011 (KR) 10-2011-0075982
Jul. 17, 2012 (KR) 10-2012-0077734

(51) **Int. Cl.**
B01J 23/00 (2006.01)
B01J 23/86 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC ***B01J 23/866*** (2013.01); ***B01J 23/002*** (2013.01); ***B01J 23/755*** (2013.01); ***B01J 37/035*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC B01J 23/866; B01J 23/002; B01J 23/755; B01J 37/035; B01J 37/08; B01J 37/12; B01J 37/16; B01J 37/348; C01B 3/40
USPC 502/325
See application file for complete search history.

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(57) **ABSTRACT**

Provided are a metal structure catalyst and a method of preparing the same. Particularly, the method includes forming a metal precipitate on a metal support by contact of a mixed solution including a precursor of a metal catalyst and a precipitating agent with the metal support, and forming metal particles by thermally treating and reducing the metal precipitate formed on the metal support. The metal structure catalyst includes a metal support, a metal oxide layer formed on the metal support, and metal nanoparticles formed on the metal oxide layer. In addition, the metal nanoparticles are uniform and have enhanced binding strength.

12 Claims, 6 Drawing Sheets