



US 20230082855A1

(19) **United States**

(12) **Patent Application Publication**
Hodgkins et al.

(10) Pub. No.: **US 2023/0082855 A1**

(43) Pub. Date: **Mar. 16, 2023**

(54) **PLATINUM NANOPARTICLE
FUNCTIONALIZED AMINE-MODIFIED
FIBROUS HIERARCHICAL ZEOLITE AND
METHOD OF MAKING THE SAME**

Publication Classification

- (51) Int. Cl.
 - C01B 39/02* (2006.01)
 - C01B 39/40* (2006.01)
 - C07F 15/00* (2006.01)
 - C07F 17/02* (2006.01)
- (52) U.S. Cl.
 - CPC *C01B 39/026* (2013.01); *C01B 39/40* (2013.01); *C07F 15/0086* (2013.01); *C07F 17/02* (2013.01); *C01P 2002/86* (2013.01); *C01P 2002/85* (2013.01); *C01P 2004/03* (2013.01); *C01P 2004/04* (2013.01)

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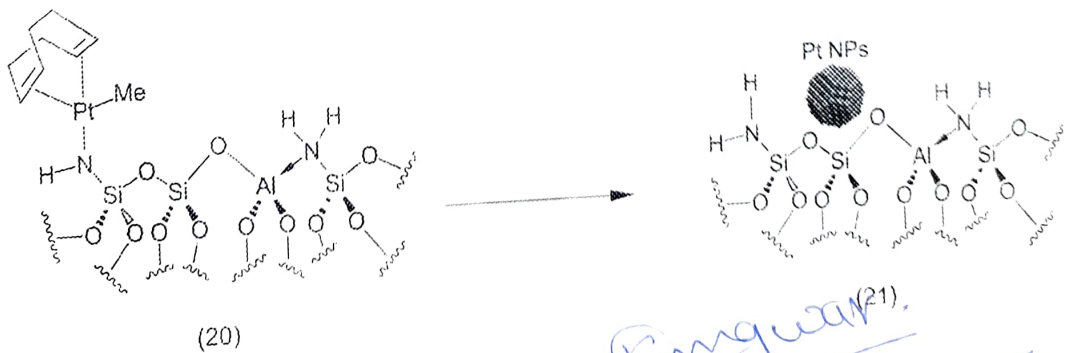
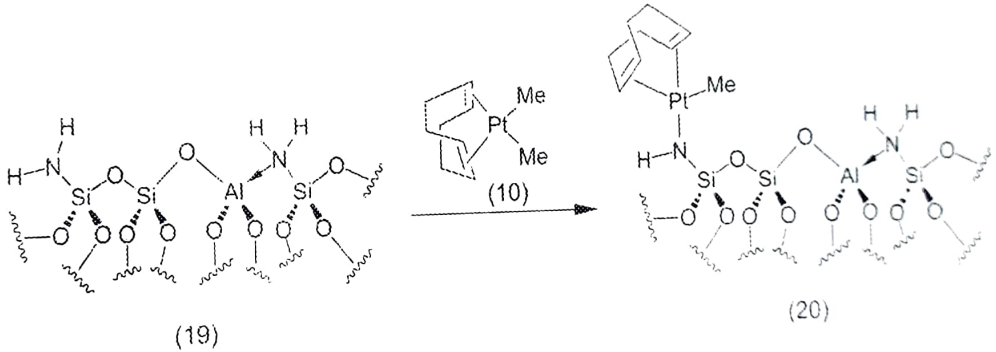
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(21) Appl. No.: 17/412,697

(22) Filed: Aug. 26, 2021

(57) **ABSTRACT**

A functionalized fibrous hierarchical zeolite includes a framework comprising aluminum atoms, silicon atoms, and oxygen atoms, the framework further comprising a plurality of micropores and a plurality of mesopores. The functionalized fibrous hierarchical zeolite is functionalized with at least one amine. A plurality of nanoparticles comprising platinum are immobilized on the framework.



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