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(54) **NICKEL-CONTAINING ORGANOMETALLIC FUNCTIONALIZED FIBROUS HIERARCHICAL ZEOLITE AND METHOD OF MAKING THE SAME**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(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 terminal hydroxyl. Terminal organometallic functionalities are bonded to silicon atoms of the microporous framework, the terminal organometallic functionalities comprising a nickel atom.

13 Claims, 7 Drawing Sheets
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