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(71) Applicant: **EXXONMOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O.Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors: **LAI, Wenyih, Frank**; 656 Bellerive Court, Bridgewater, NJ 08807 (US). **HAMILTON, Merci, A.**; 730 West Milton Street, Easton, PA 18042 (US). **MC-CARTHY, Stephen, J.**; 4440 Devonshire Drive, Center Valley, PA 18034 (US).

(74) Agents: **PURWIN, Paul, E.** et al.; Exxonmobil Research and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

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(54) Title: PROCESS FOR PRODUCING PHOSPHORUS MODIFIED ZEOLITE CATALYSTS

(57) Abstract: In a process for producing a phosphorus-modified zeolite catalyst, an aqueous reaction mixture comprising a source of silica and a source of an organic directing agent effective to direct the synthesis of a desired zeolite is heated at a temperature and for a time sufficient to produce crystals of the desired zeolite. Wet zeolite crystals can then be separated from the reaction mixture and, without removing all the water from the wet zeolite crystals, the zeolite can be converted into the ammonium form by ion exchange, and the crystals can be treated with a phosphorus compound. The phosphorus-treated, ammonium-exchanged zeolite can then be formed into a catalyst to be heated in one or more stages to remove the water and organic directing agent from the zeolite crystals and to convert the zeolite to the hydrogen form.



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