



[12] Patent

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[21] Application No.: GCC/P/2000/990 [22] Filing Date: 04/11/2000 [30] Priority: [31] Priority No. [32] Priority date [33] State 60/166,897 22/11/1999 US [72] Inventors: 1- Mark E. Jones, 2- Michael M. Olken, 3- Daniel A. Hickman [73] Owner: Dow Global Technologies Inc., Washington Street, 1790 Building, Midland, Michigan 48674, USA [74] Agent: Saud M. A. Shawwaf	[51] Int. Cl. ⁷ : C07C 17/15, 17/152, 17/154, 17/156, 17/158; B01J 27/122, 27/08, 27/06 [56] Cited Documents: - US 5113027 A (MAINZ ERIC L et al.) 12 May 1992 - US 4046821 A (CROCE LOUIS J et al.) 06 September 1977

[54] A PROCESS FOR THE CONVERSION OF ETHYLENE TO VINYL CHLORIDE, AND NOVEL CATALYST COMPOSITIONS USEFUL FOR SUCH PROCESS

[57] Abstract: This inventions is a process for producing vinyl chloride from an ethylene-containing feed, oxygen, and a chlorine source in the presence of a catalyst. The process permits direct production of vinyl chloride in a single reactor system, and further permits ethane to be used as the C₂ hydrocarbon feed with recycle of ethylene from the product stream to constitute the ethylene specified for the feed. This invention in another aspect concerns also a composition of matter, and a method for making the composition, wherein the composition is useful as a catalyst for the vinyl chloride process. The composition comprises a rare earth-containing material, with the proviso that the catalyst prepared therefrom is substantially free of iron and copper and with the further proviso that when cerium is present the catalyst further comprises at least one more rare earth element other than cerium.

No. of claims: 39