United States Patent [19]

Zahner

[11] **4,011,275**

[45] **Mar. 8, 1977**

[54] **CONVERSION OF MODIFIED SYNTHESIS GAS TO OXYGENATED ORGANIC CHEMICALS**

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[22] Filed: **Aug. 23, 1974**

[21] Appl. No.: **499,869**

[52] **U.S. Cl.** ..... **260/668 R**; 260/449.5

[51] **Int. Cl.**[2] **C07C 15/02**

[58] **Field of Search** ..... 260/668 R, 682, 676, 260/671, 677, 672 T, 668 A, 449.5; 208/135, 141, 118, 120

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[57] **ABSTRACT**

Conversion of synthesis gas (a mixture of carbon monoxide and hydrogen) having a smaller hydrogen to carbon monoxide ratio than that required for methanol stoichiometry, i.e. 2 to 1, by passing such over a zinc-chromium-acid or copper-zinc alumina-acid modified methanol synthesis catalyst under conditions conducive to converting the synthesis gas to a mixture of methanol and dimethyl ether as the desirable organic products.

9 Claims, 8 Drawing Figures