

## [12] Patent

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[21] Application No.: GCC/P/2001/1347 [22] Filing Date: 05/05/2001 [30] Priority: [31] Priority No. [32] Priority date [33] State 09/565355 05/05/2000 US [72] Inventors: 1- Alaa Eldin M. Adris, 2- Friedrich Gutlhuber [73] Owner: Saudi Basic Industries Corporation "SABIC", P. O. Box 5101, Riyadh 11422, Kingdom of Saudi Arabia	[51] Int. Cl. <sup>7</sup> : B01J 19/24, 19/00, 8/06, 4/00 [56] Cited Documents: - US 2518583 A (CHARLES C. WATSON) 15 August 1950 - US 4196170 A (RICHARD A. CEMENSKA) 01 April 1980 - GB 1063297 A (JAN SELLIN) 30 March 1967

### [54] TUBULAR REACTOR WITH GAS INJECTOR FOR GAS PHASE CATALYTIC REACTIONS

[57] Abstract: A continuous flow chemical reaction apparatus comprises a tubular reactor having a length and having a first fluid reactant inlet at a first end and a product outlet at a second end, said tubular reactor having a central tube/ interior conduit extending lengthwise within said tubular reaction zone, said conduit having at least one injector within the length of said conduit, said injector capable of introducing a controlled amount of a second fluid reactant into said tubular reactor.

No. of claims: 16

No. of figures: 9

