[19] PATENT OFFICE OF THE COOPERATION COUNCIL FOR THE ARAB STATES OF THE GULF

[19] مكتب براءات الاختراع لمجلس التعاون لدول الخليج العربية

[12] Patent

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09/378416 20/08/1999 US
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[56] Cited Documents:
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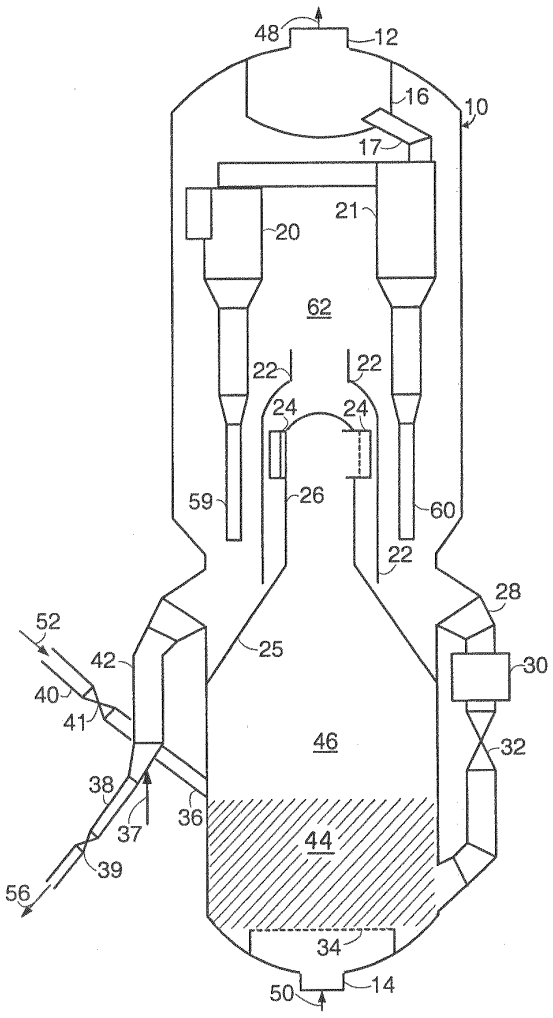
- EP 0099650 A (MOBIL OIL CORP.) 01 February 1984
- WO 00/41986 A (POP GRIGORE; BOERU RODICA; GANEA RODICA; IVANESCU DOINA) 20 July 2000
- EP 0357831 A (UNION CARBIDE CORP.) 14 March 1990

[54] FAST-FLUIDIZED BED REACTOR FOR MTO PROCESS

[57] Abstract: An oxygenate conversion process and fast-fluidized bed reactor are disclosed having an upper disengaging zone and a lower reaction zone. The process is carried out in a reaction zone having a dense phase zone in the lower reaction zone and a transition zone which extends into the disengaging zone. A portion of the catalyst is withdrawn from above the transition zone in the disengaging zone, at least partially regenerated, and returned to a point above the dense phase zone, while catalyst is continuously circulated from the disengaging zone to the lower reaction zone. The process provides a method for carrying out the overall conversion reaction with a significantly reduced catalyst inventory compared to conventional bubbling bed reactors.

No. of claims: 10 No. of figures: 1



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