

Title (en)

Reducing the temperature in a regeneration zone of a fluid catalytic cracking process.

Title (de)

Temperaturverminderung in einer Regenerationszone eines katalytischen Fluid-Crackingprozesses.

Title (fr)

Réduction de la température dans une zone de régénération d'un procédé de cracking catalytique fluide.

Publication

**EP 0195129 A1 19860924 (EN)**

Application

**EP 85116235 A 19851219**

Priority

US 70362585 A 19850220

Abstract (en)

A method for operating a fluid catalytic cracking unit comprising a regeneration zone and a reaction zone with a relatively reduced temperature in the regeneration zone while processing a high-coke-making hydrocarbon feedstock having a 50 volume percent distillation temperature greater than about 500 DEG F (260 DEG C) which method comprises contacting at conversion conditions the feedstock in a reaction zone with a fluidizable mixture of regenerated cracking catalyst and low-coke-make non-catalytic solid particles, comprising a refractory inorganic oxide, in a ratio of low-coke-make solid particles to cracking catalyst from about 1:100 to about 10:1, the low-coke-make solid particles having a surface area of less than about 5 m<sup>2</sup>/g and a coke making capability of less than about 0.2 weight percent coke in the ASTM standard method for testing cracking catalyst by microactivity (MAT); separating the resulting hydrocarbon products from the mixture of deactivated cracking catalyst and low-coke-make solid particles; recovering the hydrocarbon products; passing the mixture of cracking catalyst and low-coke-make solid particles to the regeneration zone for generation by removal of coke; and passing the resulting regenerated mixture of cracking catalyst and low-coke-make solid particles from the regeneration zone to the reaction zone to contact the feedstock as described above whereby the regeneration zone temperature is maintained at a reduced temperature as compared to an equivalent operation without the use of the low-coke-make solid particles while simultaneously not reducing the coke burning capacity of the regeneration zone or affecting the operation of the reaction zone.

IPC 1-7

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IPC 8 full level

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Citation (search report)

- GB 2114146 A 19830817 - ENGELHARD CORP
- GB 2032947 A 19800514 - ATLANTIC RICHFIELD CO
- US 4311581 A 19820119 - BARON KENNETH, et al

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