

Title (en)  
HYDROCARBON TREATMENT PROCESS

Publication  
**EP 0234924 A3 19871007 (EN)**

Application  
**EP 87301613 A 19870224**

Priority  
US 83190786 A 19860224

Abstract (en)  
[origin: EP0234924A2] A process wherein lower boiling products (H) are obtained from a hydrocarbon feed (J and/or HH) by contacting the feed with fluidized solid contact material at elevated temperature in a riser (K), spent contact material is separated and stripped of volatile hydrocarbons in a stripping zone (D), stripped contact material is regenerated with oxygen-containing gas (A) in a regeneration zone (B), and hot freshly regenerated fluidized solid contact material is returned to the riser (K), the process further including two or more of the following: (i) suspending hot regenerated contact material in a carbonizable lift gas at the lower portion of the riser and injecting hydrocarbon feed higher in the riser; (ii) charging hydrocarbon feed into the base of the riser, steam cooling a portion of the hot freshly regenerated contact material, and contacting the hydrocarbon feed with hot regenerated contact material upstream of where said hydrocarbon feed is contacted with the steam cooled contact material; (iii) cooling a portion of hot freshly regenerated contact material before returning it to the riser; and (iv) adding a portion of freshly heated regenerated contact material to said stripping zone.

IPC 1-7  
**C10G 11/18**

IPC 8 full level  
**C10G 11/18** (2006.01)

CPC (source: EP)  
**C10G 11/18** (2013.01)

Citation (search report)  
• [X] US 3886060 A 19750527 - OWEN HARTLEY  
• [X] EP 0137998 A2 19850424 - ASHLAND OIL INC [US]  
• [Y] US 2353505 A 19440711 - SCHEINEMAN FRED W  
• [A] US 2427820 A 19470923 - THOMAS CHARLES L  
• [A] US 2374073 A 19450417 - ARNOLD BELCHETZ

Cited by  
CN106398759A; AU626417B2; EP0591185A4; EP0420967A4; EP0282371A1; FR2610638A1; US4875993A; WO9012076A1

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**EP 0234924 A2 19870902; EP 0234924 A3 19871007**; BR 8700865 A 19871222; CN 87100848 A 19871028

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**EP 87301613 A 19870224**; BR 8700865 A 19870224; CN 87100848 A 19870214