

Title (en)  
PROCESS FOR SEPARATION OF SOLIDS FROM LIQUID HYDROCARBONS

Publication  
**EP 0087965 A3 19840111 (EN)**

Application  
**EP 83301039 A 19830228**

Priority  
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Abstract (en)  
[origin: EP0087965A2] A process for the separation of solids from liquid hydrocarbons in which liquid hydrocarbons comprising oils, asphaltenes and pre-asphaltenes containing insoluble solids are contacted with a volatile solvent compatible with the liquid hydrocarbons for solubilizing said oils, asphaltenes and pre-asphaltenes. The liquid hydrocarbons containing solids are contacted with the volatile solvent in stages to form a carrier solution which preferably is displaced by the volatile solvent, preferably by a countercurrent or crosscurrent contacting mode, to produce a slurry of insoluble solids with volatile solvent substantially free of the said liquid hydrocarbons, to permit a separation and removal of said insoluble solids by gravity settling, preferably under centrifugal forces, such that a minimum of interstitial liquid containing a minor amount of the liquid hydrocarbons is discharged with the insoluble solids. The interstitial liquid, composed largely of the volatile solvent, is substantially recovered from the solids by evaporation. The liquid hydrocarbons, including substantially all the asphaltenes and pre-asphaltenes, are thus effectively separated from the solids and can be in turn separated from the volatile solvent for conventional processing. High losses of the asphaltenes and pre-asphaltenes inherent in known processes, particularly for low rank coals such as lignite coals, are avoided.

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**C10G 21/00**; **C10G 1/04**

IPC 8 full level  
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