

Title (en)
RAPID THERMAL PROCESSING OF HEAVY OIL FEEDSTOCKS

Title (de)
THERMISCHES KURZZEITVERFAHREN ZUR BEHANDLUNG VON SCHWERÖLEINSATZSTOFFEN

Title (fr)
TRAITEMENT THERMIQUE RAPIDE DE CHARGES DE PÉTROLE LOURD

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Application
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Abstract (en)
The present invention is directed to the use of an upgraded liquid feedstock as a product for pipeline transport to permit further processing of the upgraded liquid feedstock elsewhere. The upgraded liquid feedstock is produced from a heavy hydrocarbon feedstock, which is not transportable by pipeline to an offsite location without addition of diluents, by a method for upgrading a heavy hydrocarbon feedstock comprises introducing a particulate heat carrier into an upflow reactor, introducing the heavy hydrocarbon feedstock into the upflow reactor at a location above that of the particulate heat carrier so that a loading ratio of the particulate heat carrier to feedstock is from about 15:1 to about 200:1, allowing the heavy hydrocarbon feedstock to interact with the heat carrier with a residence time of less than about 1 second, to produce a product stream, separating the product stream from the particulate heat carrier, regenerating the particulate heat carrier, and collecting a gaseous and liquid product from the product stream. The upgraded feedstock exhibiting reduced viscosity and increased API gravity.

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