

Title (en)
SYSTEM AND METHOD FOR HYDROCONVERSION OF HEAVY OILS BY MEANS OF REACTORS WITH DISPERSED CATALYST OR WITH EXPANDED CATALYST BED WITH INTRODUCTION OF GAS AT THE HEAD OF THE REACTOR

Title (de)
SYSTEM UND VERFAHREN ZUR HYDROKONVERSION VON SCHWERÖLEN DURCH REAKTOREN MIT DISPERGIERTEM KATALYSATOR ODER MIT ERWEITERTEM KATALYSATORBETT MIT ZUFÜHRUNG EINES GASES AN DER SPITZE DES REAKTORS

Title (fr)
SYSTÈME ET PROCÉDÉ D'HYDROCONVERSION D'HUILES LOURDES À L'AIDE DE RÉACTEURS À CATALYSEUR DISPERSÉ OU AVEC UN LIT DE CATALYSEUR EXPANSÉ AVEC INTRODUCTION DE GAZ AU NIVEAU DE LA TÊTE DU RÉACTEUR

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Abstract (en)
[origin: WO2017021987A1] The invention refers to a system for hydroconversion of heavy oils in a single reaction stage, which employs reactors with dispersed catalyst or with expanded catalyst bed, in which the extraction of the reaction liquid through the biphasic effluent is enhanced by means of the introduction of gas at the head of the reactor, in a zone containing biphasic foam above the reaction liquid. The introduction of gas at the head of the reactor improves the extraction at the liquid state of the high-boiling conversion products. The aim is to: improve the hydroconversion unit capacity of a reactor, simultaneously rendering it independent of the height of the reactor; in the case of reactors with expanded catalyst bed, operating such reactors in a single reaction stage with high degree of conversion; and in the case of reactors with dispersed catalyst or with expanded catalyst bed in which dispersed catalyst is also fed or with expanded catalyst bed in which only dispersed catalyst is fed and is present, reducing the consumption of the latter. The invention also refers to a method for hydroconversion of heavy oils that can be actuated by means of the system that is the object of the invention.

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