

Title (en)
HYDROCONVERSION OF A HYDROCARBON-BASED HEAVY FEEDSTOCK IN A HYBRID EBULLATED-ENTRAINED BED, COMPRISING MIXING SAID FEEDSTOCK WITH A CATALYST PRECURSOR CONTAINING AN ORGANIC ADDITIVE

Title (de)
HYDROKONVERSION EINES SCHWEREN EINSATZSTOFFS AUF KOHLENWASSERSTOFFBASIS IN EINEM HYBRIDEN FLIESSBETT MIT MISCHUNG DIESER EINSATZES MIT EINEM KATALYSATORVORLÄUFER MIT EINEM ORGANISCHEN ADDITIV

Title (fr)
HYDROCONVERSION EN LIT HYBRIDE BOUILLONNANT-ENTRAÎNÉ D'UNE CHARGE HYDROCARBONÉE LOURDE COMPRENANT LE MÉLANGE DE LADITE CHARGE AVEC UN PRÉCURSEUR DE CATALYSEUR CONTENANT UN ADDITIF ORGANIQUE

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Abstract (en)
[origin: WO2023280626A1] The present invention relates to a process for the hydroconversion of a hydrocarbon-based heavy feedstock comprising: (a) preparing a conditioned feedstock (103) by mixing said hydrocarbon-based heavy feedstock (101) with a catalyst precursor formulation (104) such that a colloidal or molecular catalyst is formed when said feedstock is reacted with sulfur, said catalyst precursor formulation (104) comprising a catalyst precursor composition (105) comprising Mo and an organic additive (102) having a carboxylic acid function and/or an ester function and/or an acid anhydride function, wherein in said formulation (104) a molar ratio of organic additive (102)/Mo ranges from 0.1 : 1 to 20 : 1; (b) heating the conditioned feedstock; (c) introducing the heated conditioned feedstock (106) into at least one hybrid ebullated-entrained bed reactor comprising a porous supported hydroconversion catalyst, and operating said reactor in the presence of hydrogen and under hydroconversion conditions in order to produce an upgraded material (107), wherein the colloidal or molecular catalyst is formed during step (b) and/or (c).

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