

Title (en)
PROCESS FOR HYDRODESULFURIZATION, HYDRODENITROGENATION, HYDROFINISHING, OR AMINE PRODUCTION

Title (de)
VERFAHREN ZUR HYDROENTSCHWEFELUNG, HYDROENTSTICKUNG, HYDROABSCHLUSS BZW. AMINHERSTELLUNG

Title (fr)
PROCÉDÉ D'HYDRODÉSULFURISATION, D'HYDRODÉNITROGÉNATION, D'HYDROFINITION, OU DE PRODUCTION D'AMINES

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Application
EP 10738908 A 20100118

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Abstract (en)
[origin: WO2010090811A1] Herein disclosed is a method for hydrodesulfurization, hydrodenitrogenation, hydrofinishing, amine production or a combination thereof. The method comprises forming a dispersion comprising hydrogen-containing gas bubbles dispersed in a liquid feedstock, wherein the bubbles have a mean diameter of less than about 5 μm and wherein the feedstock comprises a mixture of petroleum-derived hydrocarbons and a naturally derived renewable oil. The feedstock comprises hydrocarbons selected from the group consisting of liquid natural gas, crude oil, crude oil fractions, gasoline, diesel, naphtha, kerosene, jet fuel, fuel oils, and combinations thereof. The method further comprises contacting the dispersion with a catalyst that is active for hydrodesulfurization, hydrodenitrogenation, hydrofinishing, amine production, or a combination thereof. The catalyst comprises homogeneous catalysts and heterogeneous catalysts. The catalyst may be utilized in fixed-bed or slurry applications.

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Citation (search report)
• [XY] WO 2009002960 A1 20081231 - H R D CORP [US], et al
• [A] US 2004222536 A1 20041111 - HOLL RICHARD A [US]
• [XY] YUSUF ALI ET AL.: "FUEL PROPERTIES OF TALLOW AND SOYBEAN OIL ESTERS", JAOCS, vol. 72, no. 12, 31 December 1995 (1995-12-31), pages 1557 - 1564, XP002675440
• [XY] DAVID Y.Z.CHANG ET AL.: "FUEL PROPERTIES AND EMISSIONS OF SOYBEAN OIL ESTERS AS DIESEL FUELS", JAOCS, vol. 73, no. 11, 31 December 1996 (1996-12-31), pages 1549 - 1555, XP002675470
• See references of WO 2010090811A1

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