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(54) Title: MILD CATALYTIC METHOD TO SELECTIVELY PRODUCE AVIATION FUEL FROM PLASTIC WASTE

(57) Abstract: The present disclosure relates to a catalytic method of producing sustainable aviation fuel from plastic waste. The method comprises subjecting plastic waste to hydrocracking under mild conditions in the presence of a catalyst to obtain a sustainable aviation fuel, wherein the mild conditions include heating the plastic waste at a temperature of less than 300oC, under 2x106 Pa of hydrogen pressure, and within 3 hours; and wherein the catalyst is a bimetallic Rh-based catalyst, Rh2MoOx, supported on an Al-SBA-15 material, represented by Rh2MoOx/Al-SBA- 15.