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(54) Title: HYDROCRACKING OF DIPHENYLALKANES

(57) Abstract: A hydrocracking process comprises the steps of reacting a diphenyl alkane having a formulation of RIR₂C(Ph)-(C)_n(H)_m-C(Ph)R₃R₄ with hydrogen using a catalyst comprising a metal selected from the group consisting of Group IB and Group VIII metal compounds, preferably on an acidic support, to produce alkylbenzene(s) having a structure of RIR₂C(Ph)R₅ and R₆(Ph)CR₃R₄; wherein the total number of carbon atoms for R₅ and R₆ is equal to n; wherein R₁, R₂, R₃, R₄ each is a H or a hydrocarbon group having 1-10 carbon atoms.



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