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(54) Title: DESULFURIZATION PROCESS AND NOVEL BIMETALLIC SORBENT SYSTEMS FOR SAME

(57) Abstract: Novel sorbent systems for the desulfurization of cracked-gasoline are provided which are comprised of a bimetallic promotor on a particulate support such as that formed of zinc oxide and an inorganic or organic carrier. Such bimetallic promotors are formed of at least two metals of the group consisting of nickel, cobalt, iron, manganese, copper, zinc, molybdenum, tungsten, silver, tin, antimony and vanadium with the valence of same being reduced, preferably to zero. Processes for the production of such sorbents are provided wherein the sorbent is prepared from impregnated particulate supports or admixed to the support composite prior to particulation, drying, and calcination. Further disclosed is the use of such novel sorbents in the desulfurization of cracked-gasoline whereby there is achieved not only removal of sulfur but also an increase in the olefin retention in the desulfurized product. Such sorbents can also be utilized for the treatment of other sulfur-containing streams such as diesel fuels.