

HYDROCARBON HYDROPROCESSING USING BULK CATALYST COMPOSITION

Abstract

The invention relates to a method for hydroprocessing hydrocarbon feedstocks, said process comprising contacting a hydrocarbon feedstock under hydroprocessing conditions with a bulk catalyst composition comprising bulk metal particles that comprise at least one Group VIII non-noble metal, at least one Group VIB metal and nanoparticles. The bulk metal catalyst composition comprises bulk metal particles that may be prepared by a manufacturing process comprising the steps of combining in a reaction mixture (i) dispersible nanoparticles having a dimension of less than about $1\mu\text{m}$ upon being dispersed in a liquid, (ii) at least one Group VIII non-noble metal compound, (iii) at least one Group VIB metal compound, and (iv) a protic liquid; and reacting the at least one Group VIII non-noble metal compound and the at least one Group VIB metal in the presence of the nanoparticles.

Figure 2