ABSTRACT

PROCESS FOR PREPARING A HYDROPROCESSING CATALYST FROM WASTE HYDROPROCESSING CATALYST

The present invention relates to a process for preparing a catalyst suitable for the hydroprocessing of heavy hydrocarbon feeds, which process comprises the steps of

(i) if necessary removing carbonaceous and sulphurous deposits from waste catalyst by subjecting the waste catalyst to a thermal treatment,

(ii) grinding the waste catalyst obtained in step (i),

(iii) mixing the ground material obtained in step (ii) with a binder and, optionally, additives, and

(iv) shaping the mixture to form a new catalyst,

wherein the loss on ignition of the catalyst composition mixture at any point in the steps (ii), (iii), and (iv) is not higher than 70 %.

The process according to the invention is suitable, int. al., for the production of ebullated bed catalysts. In that case, it is envisaged to incorporate a macroporous additive into the catalyst composition. Spent hydroprocessing catalyst which has been used for hydroprocessing light hydrocarbon feedstocks is particularly suitable for use in the process according to the invention.