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(54) Title: MESOPOROUS ZEOLITE -Y HYDROCRACKING CATALYST AND ASSOCIATED HYDROCRACKING PROCESSES

(57) Abstract: This invention relates to the composition, method of making and use of a hydrocracking catalyst that is comprised of a new Y zeolite which exhibits an exceptionally low small mesoporous peak around the 40 Å (angstrom) range as determined by nitrogen adsorption measurements. The hydrocracking catalysts of invention exhibit improved distillate yield and selectivity as well as improved conversions at lower temperatures than conventional hydrocracking catalysts containing Y zeolites. The hydrocracking catalysts herein are particularly useful in the hydrocracking processes as disclosed herein, particularly for conversion of heavy hydrocarbon feedstocks such as gas oils and vacuum tower bottoms and an associated maximization and/or improved selectivity of the distillate yield obtained from such hydrocracking processes.

