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(21) International Application Number: PCT/JP99/04722 (22) International Filing Date: 31 August 1999 (31.08.99) (30) Priority Data: 10/246458 1 September 1998 (01.09.98) JP (71) Applicant (for all designated States except US): JAPAN ENERGY CORPORATION [JP/JP]; 10-1, Toranomom 2-chome, Minato-ku, Tokyo 105-0001 (JP). (72) Inventors; and (75) Inventors/Applicants (for US only): ISHIDA, Katsuaki [JP/JP]; Japan Energy Corporation, 17-35, Niizominami 3-chome, Toda-shi, Saitama 335-8502 (JP). SAITO, Toru [JP/JP]; Japan Energy Corporation, 17-35, Niizominami 3-chome, Toda-shi, Saitama 335-8502 (JP). KOBAYASHI, Manabu [JP/JP]; Japan Energy Corporation, 17-35, Niizominami 3-chome, Toda-shi, Saitama 335-8502 (JP). MATSUZAWA, Kaori [JP/JP]; Japan Energy Corporation, 17-35, Niizominami 3-chome, Toda-shi, Saitama 335-8502 (JP). (74) Agent: KAWAKITA, Kijuro; Shinjuku MM Building, 1-15, Shinjuku 5-chome, Shinjuku-ku, Tokyo 160-0022 (JP).		(81) Designated States: ID, JP, KR, SG, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: HYDROCRACKING CATALYST, PRODUCING METHOD THEREOF, AND HYDROCRACKING METHOD (57) Abstract A hydrocracking catalyst has a carrier that has particles of a compound oxide and a binder present between these particles, and at least one metal component selected from Group 6, Group 9 or Group 10 of the Periodic Table supported on the carrier. The catalyst has a median pore diameter of 40 to 100 Å and the volume of pores whose pore diameter falls within a range of 40 to 100 Å is at least 0.1 mL/g. Moreover, the volume of pores of the catalyst whose pore diameter falls within a range of 0.05 to 5 µm is 0.05 to 0.5 mL/g, and the volume of pores whose pore diameter is 0.5 to 10 µm is less than 0.05 mL/g. This catalyst is mechanically strong enough for practical use and has a high conversion rate and middle distillate selectivity in hydrocracking of hydrocarbon oils, particularly vacuum gas oil.		