

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: C10G 11/05, B01J 23/00, 23/10	A1	(11) International Publication Number: WO 96/35762 (43) International Publication Date: 14 November 1996 (14.11.96)
(21) International Application Number: PCT/US95/14020 (22) International Filing Date: 27 October 1995 (27.10.95) (30) Priority Data: 08/440,281 12 May 1995 (12.05.95) US (71) Applicant: W.R. GRACE & CO.-CONN. [US/US]; 1114 Avenue of the Americas, New York, NY 10036 (US). (72) Inventor: KIM, Gwan; 5226 Patriot Lane, Columbia, MD 21045 (US). (74) Agent: CAPELLA, Steven; W.R. Grace & Co.-Conn., 7500 Grace Drive, Columbia, MD 21044 (US).		(81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, <u>SG</u> , SI, SK, TJ, TM, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: La/Nd-SPINEL COMPOSITIONS FOR METALS PASSIVATION IN FCC PROCESSES (57) Abstract <p>Catalytic cracking catalysts and additives which comprise a metals passivation component containing: 15-60 parts by weight MgO, 30-60 parts by weight Al₂O₃, and 10-30 parts by weight rare earth compound selected from the group consisting of La oxide, Nd oxide, and mixtures thereof, wherein at least a portion of the MgO and Al₂O₃ are in the form of an Mg-Al oxide spinel, are especially useful for catalytic cracking processes involving hydrocarbon feedstocks containing high metals (e.g. vanadium) content. The La/Nd compound may be one which forms La and/or Nd oxide during the FCC process cracking or regeneration step.</p>		