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(21) International Application Number: PCT/US99/19311 (22) International Filing Date: 25 August 1999 (25.08.99) (30) Priority Data: 60/097,982 26 August 1998 (26.08.98) US (71) Applicant (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DRULINER, Joe, Douglas [US/US]; 33 Bridleshire Road, Newark, DE 19711 (US). KOB, Nicholas, Edward, III [US/US]; 4138 Willow Bend, Port Arthur, TX 77642 (US). LANE, Samuel, Livingston [US/US]; 6435 Durango Drive, Beaumont, TX 77708 (US). STOWE, Gerald, Thomas (74) Agent: SIEGELL, Barbara, C.; E.I. du Pont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).		(81) Designated States: BR, CA, CN, CZ, ID, IN, JP, KR, MX, PL, RU, SG, SK, 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: HYDROPEROXIDE DECOMPOSITION PROCESS (57) Abstract An improved process for decomposing alkyl or aromatic hydroperoxides to form a decomposition reaction mixture containing the corresponding alcohol and ketone is disclosed. The improvement relates to adding water to a starting hydroperoxide containing mixture, then removing the bulk of said water by a means such that water-soluble impurities are removed along with the water, then decomposing the hydroperoxide by contacting the hydroperoxide with a catalytic amount of a heterogeneous catalyst of Au, Ag, Cu or a sol-gel compound containing particular combinations of Cr, Co, Zr, Ta, Si, Mg, Nb, Al and Ti wherein certain of those metals have been combined with an oxide, such as an inorganic matrix of hydroxides or oxides, or combinations thereof. The catalysts may also optionally be supported on a suitable support member.		