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(21) International Application Number: PCT/US98/03453 (22) International Filing Date: 23 February 1998 (23.02.98) (30) Priority Data: 08/813,097 7 March 1997 (07.03.97) US (71) Applicant: HOECHST CELANESE CORPORATION [US/US]; Route 202-206 North, Somerville, NJ 08876 (US). (72) Inventors: ASLAM, Mohammad; 7221 Diamond Ridge, Corpus Christi, TX 78413 (US). SHEEHAN, Michael, T.; 3117 Briarhurst, Corpus Christi, TX 78414 (US). KUILA, Debassish; 4434 Silver Hollow, Corpus Christi, TX 78413 (US). (74) Agents: GENOVA, John, M. et al.; Hoechst Celanese Corporation, 86 Morris Avenue, Summit, NJ 07901 (US).		(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: PHOTOACTIVE COUMARIN DERIVATIVES (57) Abstract A new class of 3,4-dihydrocoumarin derivatives which are useful as photoactive compounds in a wide variety of applications including photoresists and other opto-electronic applications are disclosed and claimed. Preferred embodiments include ether, ester, carbonate, and sulfonate derivatives of 5-hydroxy, 6-hydroxy, and 7-hydroxy-3-diazo-4-oxo-3,4-dihydrocoumarins. These compounds exhibit very high photosensitivity in the deep ultraviolet (DUV) region (ca. 250 nm), and therefore, are useful as photoactive compounds in DUV photoresist formulations.		