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(21) International Application Number: PCT/US98/03448 (22) International Filing Date: 23 February 1998 (23.02.98) ✓ (30) Priority Data: ① 08/813,106 ✓ 7 March 1997 (07.03.97) ✓ US ✓ (71) Applicant: HOECHST CELANESE CORPORATION [US/US]; Route 202-206 North, Somerville, NJ 08876 (US). (72) Inventors: ① ASLAM, Mohammad; 7221 Diamond Ridge, Corpus Christi, TX 78413 (US). ② SHEEHAN, Michael, T.; 3117 Briarhurst, Corpus Christi, TX 78414 (US). ③ KVAKOVSKY, George; 536 Naples, Corpus Christi, TX 78404 (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 With international search report. ✓ 1 PD. 1 appl ¹ (see 18/306) 3 Invs. IPC = C07D 311/56 IPER 5/10/98	
(54) Title: PROCESS FOR PREPARING COUMARIN SULFONATES ✓			
(57) Abstract A novel process for preparing sulfonic acid esters and amides of benzo-heterocyclic diazo diketo compounds, such as substituted diazo-4-oxo-3,4-dihydrocoumarins, which are useful synthetic intermediates in a wide variety of applications including photoresists, opto-electronics, agricultural, and pharmaceutical applications is disclosed and claimed. The process comprises the steps of (a) subjecting a substituted benzo-heterocyclic β-keto-enol compound to suitable diazo transfer conditions in the presence of a diazo transfer agent; (b) subjecting the so formed diazo diketo compound to suitable halosulfonation conditions in the presence of a halosulfonation agent; and (c) subjecting the so formed halosulfonyl aromatic compound to suitable substitution reaction in the presence of an alcohol or an amine to form the corresponding sulfonic acid ester or amide of benzo-heterocyclic diazo diketo compound. The compounds formed from the process of the present invention exhibit very high photosensitivity in the deep ultraviolet (DUV) region (ca. 250 nm), and therefore, are useful as photoactive compounds in DUV photoresist formulations.			