

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 July 2001 (05.07.2001)

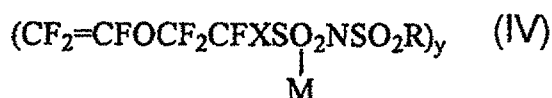
PCT

(10) International Publication Number
WO 01/47872 A1

- (51) International Patent Classification⁷: C07C 307/06, 303/34 Katherina [DE/US]; 1325 West 10th Street, Wilmington, DE 19806 (US).
- (21) International Application Number: PCT/US00/34074 (74) Agent: SIEGELL, Barbara, C.; E.I. duPont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).
- (22) International Filing Date: 18 December 2000 (18.12.2000)
- (25) Filing Language: English (81) Designated States (*national*): AT, AU, CA, CH, CN, DE, DK, ES, FI, GB, JP, KR, LU, MX, PT, SE, SG, US.
- (26) Publication Language: English (84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
- (30) Priority Data: 60/167,048 23 December 1999 (23.12.1999) US
- (71) Applicant (*for all designated States except US*): E.I. DUPONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). Published:
With international search report.
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): BLAU, Hanne, Anna,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PREPARING FLUOROSULFONYL IMIDE MONOMER



(57) Abstract: Disclosed is a method for the preparation of a fluorosulfonyl imide monomer of the structure represented by formula (IV), wherein X is F or perfluoroalkyl having 1-4 carbons optionally substituted by ether oxygen, M is an alkali or alkaline earth metal when y is respectively 1 or 2, R is aryl, fluoro-aryl, or XCF₂- where X is H, halogen, fluorinated or non-fluorinated linear or cyclic alkyl having 1-10 carbons, optionally substituted by one or more ether oxygens. Such monomers are useful for forming ionomers useful in electrochemical applications such as batteries, fuel cells, electrolysis cells, ion exchange membranes, sensors, electrochemical capacitors, strong acid catalysts, and modified electrodes.