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(21) International Application Number: PCT/US98/13504 (22) International Filing Date: 29 June 1998 (29.06.98) (30) Priority Data: 60/054,588 1 August 1997 (01.08.97) US (71) Applicant (for all designated States except US): THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): CARNAHAN, Edmund, MI [US/US]; 4919 Twin Elm Drive, Fresno, TX 77545 (US). JACOBSEN, Grant, B. [GB/US]; 5454 Newcastle Drive #1845, Houston, TX 77081 (US). KLOSIN, Jerzy [PL/US]; 2504 Abbott Road #07, Midland, MI 48642 (US). NICKIAS, Peter, N. [US/US]; 2705 Mt. Vernon Drive, Midland, MI 48642 (US). SCHWARTZ, David, J. [US/US]; 510 That Way Boulevard, Lake Jackson, TX 77566 (US). NEITHAMER, David, R. [US/US]; 6007 Sturgeon Creek Parkway, Midland, MI 48640 (US). (74) Agent: DELINE, Douglas, N.; The Dow Chemical Company, Patent Dept., P.O. Box 1967, Midland, MI 48641-1967 (US).		
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(54) Title: ZWITTERIONIC CATALYST ACTIVATOR		
$L^+-R^1-M^1-(Ar^f)_3, R^2M^1 \begin{array}{c} \diagup R^4 \\ \diagdown \\ \diagup ZR^2_2 \end{array} M^1R^2_2 \quad (I)$ $R^2M^1 \begin{array}{c} \diagup R^4 \\ \diagdown \\ \diagup YR^2 \end{array} M^1R^2_2 \quad (II)$		
(57) Abstract A catalyst activator particularly adapted for use in the activation of metal complexes of metals of Group 3-10 for polymerization of ethylenically unsaturated polymerizable monomers, especially olefins, comprising a zwitterionic compound corresponding to the formula (I) or (II), wherein: L⁺ is a protonated derivative of an element of Group 15 of the Periodic Table of the Elements, additionally bearing two hydrocarbyl substituents of from 1 to 50 carbons each, or a positively charged derivative of an element of Group 14 of the Periodic Table of the Elements, said Group 14 element being substituted with three hydrocarbyl substituents of from 1 to 50 carbons each; R¹ is a divalent linking group of from 1 to 40 non-hydrogen atoms; R² independently each occurrence is a ligand group of from 1 to 50 nonhydrogen atoms with the proviso that in a sufficient number of occurrences to balance charge in the compound. R² is L⁺-R¹; R⁴ is a bridging hydride or halide group or a divalent linking group of from 1 to 40 non-hydrogen atoms; M¹ is boron, aluminum or gallium; Ar^f independently each occurrence is a monovalent, fluorinated organic group containing from 6 to 100 non-hydrogen atoms; Y is a Group 15 element; and Z is a Group 14 element.		