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(54) **Title:** QUATERNARY HETEROATOM CONTAINING COMPOUNDS

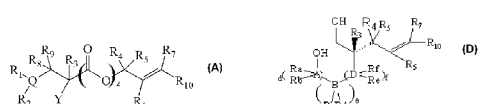
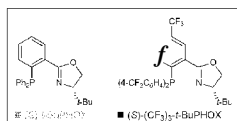
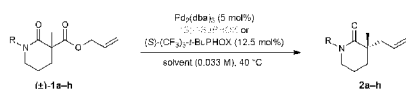
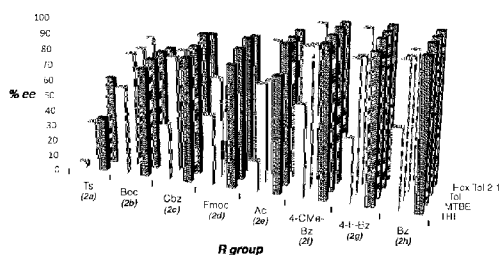


FIG. 1



(57) **Abstract:** A compound useful as a building block for the manufacture of various compounds is represented by Formula A or D. In Formula A and D, z is 0 or 1; Q is a heteroatom; R1 through R11 and Ra through Rf are each independently hydrogen, a substituted or unsubstituted hydrocarbyl group, a substituted or unsubstituted heteroatom containing hydrocarbyl group, or a functional group; d, e and f are each independently 0 or greater; each of A, B and D is independently a carbon atom or a heteroatom; and two or more of R1 through R11, Ra through Rf and Y optionally combine to form a ring. In some embodiments, R8 and R9 combine to form a carbonyl group. In some embodiments, R2 and Y combine to form a ring with the Q atom. In some embodiments, the ring includes at least one double bond.

GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER*C07D 211/14(2006.01)i, C07D 211/10(2006.01)1, C07D 241/04(2006.01)1*

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: amine containing compound

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 05591769A A (HIMMELSBACH; FRANK et al.) 07 January 1997 See example 17 on column 44	1-4,6,8,14-15
X	W0 2009-013390 A1 (ORION CORPORATION et al.) 29 January 2009 See claims 1, 32	1,3-4,6-7,9
X	W0 2009-153178 A2 (F. HOFFMANN-LA ROCHE AG et al.) 23 December 2009 See example 3 on page 47	1,3-4,6-7
A	US 2010-0298293 A1 (ALLERHEILIGEN SWEN et al.) 25 November 2010 See whole document	1-18

 Further documents are listed in the continuation of Box C. See patent family annex.

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