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(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

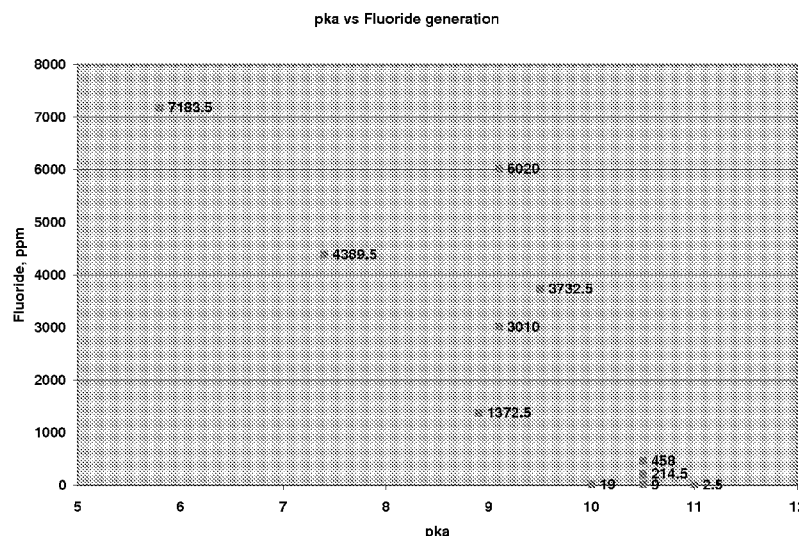
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[Continued on next page]

(54) **Title:** POLYURETHANE FOAM PREMIXES CONTAINING HALOGENATED OLEFIN BLOWING AGENTS AND FOAMS MADE FROM SAME



(57) **Abstract:** The invention provides polyurethane and polyisocyanurate foams and methods for the preparation thereof. More particularly, the invention relates to closed-celled, polyurethane and polyisocyanurate foams and methods for their preparation. The foams are characterized by a fine uniform cell structure and little or no foam collapse. The foams are produced with a polyol premix composition which comprises a combination of a hydrohaloolefin blowing agent, a polyol, a silicone surfactant, and an amine catalyst that preferably has a Fluoride Generation Value of not greater than about 1000 ppm.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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A. CLASSIFICATION OF SUBJECT MATTER*C08G 18/16(2006.01)i, C08G 18/28(2006.01)i, C08J 9/06(2006.01)i, C08G 101/00(2006.01)n*

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)

C08G18/10, C08G18/18, C08J9/04, C08G101/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & keywords: foamalbe composition, hydrohaloolefin blowing agent, polyol, surfactant, catalyst, fluoride generation value.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2010-0097110 A (HONEYWELL INTERNATIONAL INC.) 02 September 2010 See abstract; claims 1, 4, 13; paragraphs [0015], [0025], [0026], [0029], [0032], [0033], [0054], [0055].	1-10
X	WO 2009-048826 A2 (HONEYWELL INTERNATIONAL INC.) 16 April 2009 See abstract; claims 1, 5, 13; page 5, lines 6-10; page 6, line 15 - page 7, line 9; page 9, line 8 - page 10, line 18; page 11, lines 16-21; page 17, lines 4-12.	1-10
X	US 2011-0039964 A1 (WILLIAMS, D. J. et al.) 17 February 2011 See abstract; claims 1-3, 8, 13, 22, 27-29; paragraphs [0003], [0011], [0014], [0026], [0030], [0035]-[0038], [0040], [0041], [0043].	1-10
A	EP 0409199 A2 (THE DOW CHEMICAL COMPANY) 23 January 1991 See abstract; claim 1; page 3, lines 26-35; page 4, lines 14-18; page 6, lines 14-34.	1-10
A	US 2003-0199599 A1 (BOGDAN, M. C. et al.) 23 October 2003 See abstract; claims 1, 4, 10, 13; paragraphs [0018], [0031], [0034].	1-10



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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International application No.

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