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(54) Title: COMPOSITIONS COMPRISING 1,2,3,3,3-PENTAFLUOROPROPENE WITH Z- AND E-ISOMER RATIO OPTIMIZED FOR REFRIGERATION PERFORMANCE

(57) Abstract: Azeotropic or near- azeotropic compositions are disclosed comprising about 0.1 weight percent to about 99.9 weight percent Z-1,2,3,3,3-pentafluoropropene (Z-1225ye) and about 99.9 weight percent to about 0.1 weight percent E-1,2,3,3,3-pentafluoropropene (E-1225ye). Also disclosed is a method for increasing refrigeration capacity for 1,2,3,3,3-pentafluoropropene (HFC-1225ye) said method comprising increasing the amount of Z-isomer (Z-1225ye) relative to the amount of E-isomer (E-1225ye).

# INTERNATIONAL SEARCH REPORT

international application No  
PCT/US2007/025383

A. CLASSIFICATION OF SUBJECT MATTER  
INV. C09K5/04 C08J9/14 C09K3/30 A62D1/00

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)  
C09K A62D C08J

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 practical search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 2004/127383 A1 (PHAM HANG T [US] ET AL) 1 July 2004 (2004-07-01) paragraphs [0006], [0016], [0017] paragraphs [0024], [0032] claims 1,13,15,23.24,34.36,44,45,51,57 claims 59-72 -----	1,5-7, 10-18
A	US 6 031 141 A (MALLIKARJUNA RAO V N [US] ET AL) 29 February 2000 (2000-02-29) column 2, lines 53-56 example 3 -----	1,5
P, X	WO 2007/053178 A (DU PONT [US]; MILLER RALPH NEWTON [US]; NAPPA MARIO JOSEPH [US]; RAO V) 10 May 2007 (2007-05-10) example 3; table 5 ----- -/-	1,5

Further documents are listed in the continuation of Box C

See patent family annex

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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
E	WO 2008/030439 A (DU PONT [US]; RAO VELLIYUR NOTT MALLIKARJUNA [US]; SIEVERT ALLEN CAPRO) 13 March 2008 (2008-03-13) examples 1,2 -----	1, 5, 6

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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<b>us</b> 6031141 <b>A</b>	29-02-2000	<b>NONE</b>	
<b>WO</b> 2007053178 <b>A</b>	10-05-2007	<b>AR</b> 056970 <b>A1</b>	07-11-2007
<b>WO</b> 2008030439 <b>A</b>	13-03-2008	<b>NONE</b>	