(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/067557 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/001507

(22) International Filing Date: 12 January 2005 (12.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/536,819 14 January 2004 (14.01.2004) US
11/014,438 16 December 2004 (16.12.2004) 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).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **MINOR, Barbara, Haviland** [US/US]; 233 Greenhaven Drive, Elkton, MD 21921 (US). **NAPPA, Mario, J.** [US/US]; 3 Oakridge Court, Newark, DE 19711 (US). **SIEVERT, Allen, C.** [US/US]; 215 Rhett Lane, Elkton, MD 21921 (US).

(74) Agent: **SEBREE, Chyrrea, J.**; E. I. DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, 4417 Lancaster Pike, Wilmington, DE 19805 (US).

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

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

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.

WO 2005/067557 A2

(54) Title: 1,1,1,2,2,3,3,4,4-NONAFLUORO-4-METHOXYBUTANE REFRIGERANT COMPOSITIONS COMPRISING HYDROFLUOROCARBON, AND USES THEREOF

(57) Abstract: Disclosed herein are refrigerant or heat transfer fluid compositions further comprising fluoroether, 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane, and hydrofluorocarbon, which are useful in refrigeration or air conditioning apparatus or as heat transfer fluids. The compositions of the present invention are also useful in centrifugal compressor apparatus that employ two-stage compressors or single slab/single pass heat exchangers.