CLAIMS

1. A composition comprising HFO-1234yf, HFO-1234ze, HFO-1225zc, and HFC-245fa wherein the total amount of HFO-1225zc and HFC-245fa is greater than zero but less than 0.5 weight percent , wherein the composition further comprises at least one additional compound comprising at least one member selected from the group consisting of HCO-1250xf, HCC-260da, HCC-240aa, HCO-1230xa, HCFO-1233xf, HCFO-1233zd, HCFC-244bb, HCFC-244db, HFC-245cb, HFO-1243zf, HCFO-1223za, HCFO-1224zb, HCFC-241db, HCFC-242dc, HCFO-1232xf, HCFO-1231xf, and HCFO-1233yf.

2. A mobile heat transfer system refrigerant comprising HFO-1234yf, HFO-1234ze, HFC-245fa, HFO-1225zc, HFC-245eb and at least one lubricant wherein the total amount of HFC-245fa, HFO-1225zc and HFC-245eb is greater than zero but less than 0.5 weight percent, wherein the refrigerant further comprises at least one additional compound comprising at least one member selected from the group consisting of HCO-1250xf, HCC-260da, HCC-240aa, HCO-1230xa, HCFO-1233xf, HCFO-1233zd, HCFC-244bb, HCFC-244db, HFC-245cb, HFO-1243zf, HCFO-1223za, HCFO-1224zb, HCFC-241db, HCFC-242dc, HCFO-1232xf, HCFO-1231xf, and HCFO-1233yf.

3. A stationary heat transfer system refrigerant comprising HFO-1234yf, HFO-1234ze, HFC-245fa, HFC-245eb HFO-1225zc and at least one lubricant wherein the total amount of HFC-245fa, HFC-245eb and HFO-1225zc is greater than zero but less than 0.5 weight percent, wherein the refrigerant further comprises at least one additional compound comprising at least one member selected from the group consisting of HCO-1250xf, HCC-260da, HCC-240aa, HCO-1230xa, HCFO-1233xf, HCFO-1233zd, HCFC-244bb, HCFC-244db, HFC-245cb, HFO-1243zf, HCFO-1223za, HCFO-1224zb, HCFC-241db, HCFC-242dc, HCFO-1232xf, HCFO-1231xf, and HCFO-1233yf.

4. The composition of Claim 1 wherein the amount of the additional compound is less than 1 wt.%

5. The refrigerant of Claim 2 wherein the amount of the additional compound is less than 1 wt.%.

6. The refrigerant of Claim 3 wherein the amount of the additional compound is less than 1 wt.%.

7. The composition of Claim 1 wherein the additional compound comprises at least one of HCFC-244bb and HCFO-1233xf.

8. The refrigerant of Claim 2 wherein the additional compound comprises at least one of HCFC-244bb and HCFO-1233xf.

9. The refrigerant of Claim 3 wherein the additional compound comprises at least one of HCFC-244bb and HCFO-1233xf.

10. The composition of Claim 1 wherein the HFO-1234ze comprises E-isomer of HFO-1234ze.

11. The composition of Claim 1 wherein the HFO-1234ze comprises Z-isomer of HFO-1234ze.

12. The mobile heat transfer system refrigerant of Claim 2 wherein the system comprises at least one of mobile refrigerators, mobile air conditioning units and heat pumps.

13. The stationary heat transfer system refrigerant of Claim 3 wherein the system comprises at least one of air conditioners, freezers, refrigerators, heat pumps, water chillers, flooded evaporator chillers, direct expansion chillers and walk-in coolers.

14. The composition of claim 1 wherein the additional compound comprises HFC-245cb.

15. The refrigerant of claim 2 wherein the additional compound comprises HFC-245cb.

16. The refrigerant of claim 3 wherein the additional compound comprises HFC-245cb.

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17. A composition comprising HFO-1234yf, E isomer of HFO-1234ze, Z isomer of HFO-1234ze, HFO-1225zc and HFC-245fa wherein the total amount of HFO-

1225zc and HFC-245fa is greater than zero and less than 1 weight percent, wherein the composition further comprises HFC-245eb.

18. The composition of claim 17 further comprising HFC-245cb.

19. The composition of claim 18 wherein the amount of HFC-245cb ranges from 1 to 1000 ppm.

20. The composition of claim 19 wherein the amount of HFC-245cb ranges from 1 to 500pm.

21. The composition of claim 20 wherein the amount of HFC-245cb ranges from 10 to 300ppm.