CLAIMS

What is claimed is:

1. A composition comprising HFO-1234yf and at least one additional compound selected from the group consisting of HFO-1234ze, HFO-1243zf, HCFC-243db, HCFC-244db, HFC-245cb, HFC-245fa, HCFO-1233xf, HCFO-1233zd, HCFC-253fb, HCFC-234ab, HCFC-243fa, ethylene, HFC-23, CFC-13, HFC-143a, HFC-152a, HFC-236fa, HCO-1130, HCO-1130a, HFO-1336, HCFC-133a, HCFC-254fb, HCFC-1131, HFO-1141, HCFO-1242zf, HCFO-1223xd, HCFC-233ab, HCFC-226ba, and HFC-227ca.

2. The composition of claim 1 containing less than about 1 weight percent of the at least one additional compound.

3. A composition comprising HCFC-243db and at least one additional compound selected from the group consisting of ethylene, HFC-23, CFC-13, HFC-143a, HFC-152a, HFO-1234yf, HFO-1243zf, HFC-236fa, HCO-1130, HCO-1130a, HFO-1234ze, HFO-1336, HCFC-244bb, HCFC-244db, HFC-245fa, HFC-245cb, HCFC-133a, HCFC-254fb, HCFC-1131, HCFO-1233xf, HCFO-1233zd, HCFO-1242zf, HCFC-253fb, HCFO-1223xd, HCFC-233ab, HCFC-226ba, and HFC-227ca.

4. A composition comprising HCFO-1233xf and at least one additional compound selected from the group consisting of HCFO-1233zd, HCFO-1232xd, HCFO-1223xd, HCFC-253fb, HCFC-233ab, HFO-1234yf, HFO-1234ze, ethylene, HFC-23, CFC-13, HFC-143a, HFC-152a, HFO-1243zf, HFC-236fa, HCO-1130, HCO-1130a, HFO-1336, HCFC-244bb, HCFC-244db, HFC-245fa, HFC-245cb, HCFC-133a, HCFC-254fb, HCFC-1131, HCFO-1242zf, HCFO-1223xd, HCFC-233ab, HCFC-226ba, and HFC-227ca.

5. A composition comprising HCFC-244bb and at least one additional compound selected from the group consisting of HCFO-1233zd, HCFO-1232xd, HCFO-1223xd, HCFC-253fb, HCFC-233ab, HFO-1234yf, HFO-1234ze, ethylene, HFC-23, CFC-13, HFC-143a, HFC-152a, HFO-1243zf, HFC-236fa, HCO-1130, HCO-1130a, HFO-1336, HCFC-244db, HFC-245fa, HFC-245cb, HFC-245eb,

~~HCFC-133a, HCFC-254fb, HCFC-1131, HCFO-1242zf, HCFO-1223xd, HCFC-233ab, HCFC-226ba, and HFC-227ca.~~

1. A composition comprising HFO-1234yf, HFO-1234ze, HFO-1243zf and at least one additional compound selected from the group consisting of HCFO-1233xf, HCFC-244bb and HCFC-1131 wherein the amount of the at least one additional compound is greater than 0 and less than about 1 weight percent.

2. The composition of claim 1 wherein said additional compound comprises HCFO-1233xf.

3. The composition of claim 1 wherein said additional compound comprises HCFC-1131.

4. The composition of claim 1 wherein said additional compound comprises HCFC-244bb.

5. The composition of claim 2 wherein said additional compound comprises HCFO-1233xf and HCFC-1131.

6. A method for carrying heat from a heat source to a heat sink wherein a media comprising the composition of claim 1 is used as heat transfer fluid.

7. A heat transfer system comprising at least one member selected from the group consisting of air conditioners, freezers, refrigerators, heat pumps, water chillers, flooded evaporator chillers, direct expansion chillers, walk-in coolers, heat pumps, mobile refrigerators, mobile air conditioning units and combinations thereof; and wherein the system comprises a working fluid comprising the composition of claim 1.

8. The heat transfer system of claim 7 wherein the system comprises a mobile refrigeration apparatus.

9. A method for carrying heat from a heat source to a heat sink wherein a media comprising the composition of claim 1 is used as heat transfer fluid.

10. A method for carrying heat from a heat source to a heat sink wherein a media comprising the composition of claim 1 is used as heat transfer fluid.