

TITLE

PRODUCING HEATING USING WORKING FLUIDS COMPRISING Z-1,1,1,4,4,4-HEXAFLUORO-2-BUTENE

ABSTRACT OF THE INVENTION

5 Disclosed herein is a method for producing heating in a high temperature
heat pump comprising condensing a vapor working fluid comprising Z-
1,1,1,4,4,4-hexafluoro-2-butene, in a condenser, thereby producing a
liquid working fluid. Also disclosed herein is a method of raising the
maximum feasible condenser operating temperature in a high temperature
10 heat pump apparatus comprising charging the high temperature heat
pump with a working fluid comprising Z-1,1,1,4,4,4-hexafluoro-2-butene.
Also disclosed herein is a composition comprising: (a) Z-1,1,1,4,4,4-
hexafluoro-2-butene; (b) 2-chloropropane; and (c) at least one lubricant
suitable for use at a temperature of at least about 150°C; wherein the 2-
15 chloropropane is present in an amount effective to form an azeotrope or
azeotrope-like combination with the Z-1,1,1,4,4,4-hexafluoro-2-butene.
Also disclosed herein is a high temperature heat pump apparatus
containing a working fluid comprising Z-1,1,1,4,4,4-hexafluoro-2-butene.

20 [Figure 1]