CLAIMS

1. A compression apparatus for applying pressure to a subject, the compression apparatus comprising:

a compression system; and

one or more compression components connected to the compression system and secured around the subject, the one or more compression components comprising an air cavity and a liquid cavity, the liquid cavity disposed between the air cavity and the subject when secured around the subject;

the compression system comprising:

an air circuit configured to sequentially introduce air into the air cavity for a predetermined compression time and thereafter release the air from the air cavity for a predetermined decompression time until an operator-set treatment duration is reached;

a liquid circuit comprising a liquid pump connected to a tank comprising coolant, the liquid pump configured to supply the coolant to the liquid cavity by way of an output channel; and

a refrigeration circuit connected to the tank and configured to cool the coolant within the tank;

characterised in that liquid circuit further comprises an overflow channel disposed between and in fluidic communication with the output channel and the tank, the overflow channel configured to allow some of the coolant leaving the liquid pump to return to the tank without entering the liquid cavity.

2. The compression apparatus of claim 1, wherein the predetermined compression time is between 30 and 50 seconds.

3. The compression apparatus of claim 1, wherein the predetermined decompression time is between 10 and 30 seconds.

4. The compression apparatus of claim 1, wherein the operator-set treatment duration is between 2 and 5 hours.

5. The compression apparatus of claim 1, wherein the air circuit comprising one or more air pumps, one or more solenoid valves, and one or more pressure switches.

6. The compression apparatus of claim 5, wherein the one or more air pumps is configured to introduce air into the air cavity and the one or more solenoid valves is configured to release air from the air cavity.

7. The compression apparatus of claim 5, wherein the one or more pressure switches is configured to release air from the air cavity when the pressure within the air cavity exceeds a set pressure.

8. The compression apparatus of claim 1, wherein the refrigeration circuit is configured to cool the coolant to a predetermined temperature.

9. The compression apparatus of claim 8, wherein the predetermined temperature is between 6 and 24 °C.