Claims

1. An apparatus for generating air pressure and high frequency air pulses to a garment having an air core located adjacent the body of a person whereby the body of the person is subjected to pressure and high frequency pulses, the apparatus comprising:

a generator for producing air pressure and high frequency air pulses adapted to be operatively connected to the garment to transmit air pressure and high frequency pulses to the air core of the garment;

an electric motor drivably connected to the generator for operating the generator to produce air pressure and high frequency air pressure pulses;

a valve for restricting the flow of air to the generator to regulate the air pressure produced by the generator, said valve including an air flow control member for regulating the flow of air to the generator;

a control device operably connected to the air flow control member to operate the air flow control member to alter the flow of air to the generator; and

a controller for regulating the operation of the motor and control device to manage the time duration of operation of the generator, the high frequency of the air pulses and the air pressure produced by the generator, said controller including:

a first programmable control for regulating the time of operation of the motor and the time duration of the production of the air pressure and high frequency air pressure pulses by the generator;

a second programmable control for regulating the speed of the motor to control the high frequency of the air pulses produced by the generator; and

a third programmable control for regulating the air pressure produced by the generator, said third programmable control including a motor speed and air pressure lookup data table for controlling the operation of the control device to change the

operation of air flow control member to alter the flow of air to the generator to maintain a selected air pressure produced by the generator when the speed of the motor and high frequency air pulses are changed.

2. The apparatus of claim 1, wherein the first programmable control is operable to change the time duration up to 30 minutes.

3. The apparatus of claim 1, wherein the second programmable control is operable to change the speed of the motor to change the frequency of the air pulses between 5 to 25 pulse per second.

4. The apparatus of claim 1, wherein the control device is a solenoid operably connected to the air flow control member to change the position of the air flow control member to alter the flow of air to the generator.

5. The apparatus of claim 1, wherein the control device is a stepper motor operably connected to the air flow control member to change the position of the air flow control member to alter the flow of air to the generator.

6. The apparatus of claim 1, wherein the generator includes at least one movable member operable to generate air pressure and high frequency air pulses, said motor being operatively associated with the movable member to move the movable member to generate air pressure and high frequency air pulses.

7. The apparatus of claim 1, wherein the generator includes first and second movable members operable to generate air pressure and high frequency air pulses, said motor being

operatively connected to the first and second movable members to move the first and second movable members to generate air pressure and high frequency air pulses.

8. An apparatus for generating air pressure and high frequency air pulses for use in a garment to subject the body of a person to pressure and high frequency pulses, the apparatus comprising:

a generator for producing air pressure and high frequency air pulses for use by the garment to subject a person's body to pressure and high frequency pulses, said generator including a motor operating the generator to produce air pressure and high frequency air pressure pulses;

a valve for restricting the flow of air to the generator to regulate the air pressure produced by the generator;

a control device operably connected to the valve to operate the valve to alter the flow of air to the device thereby change the air pressure produced by the generator; and

a controller for regulating the operation of the motor and control device to manage the high frequency air pulse and the air pressure produced by the generator, said controller including:

a first control for regulating the speed of the motor to establish the high frequency of the air pulses produced by the generator; and

a second control for regulating the air pressure produced by the generator, said second control including a motor speed and air pressure lookup data table for controlling the operation of the control device to change the operation of the valve to alter the flow of air to the generator to maintain a selected air pressure produced by the generator when the speed of the motor and high frequency air pulses are changed.

9. The apparatus of claim 8, wherein the valve includes an air flow control member operably connected to the control device whereby operation of the motor regulates the air flow control member to alter the flow of air to the generator to change the air pressure produced by the device when the speed of the motor and high frequency air pulses are changed.

10. The apparatus of claim 9, wherein the control device is a solenoid operably connected to the air flow control member to change the position of the air flow control member to alter the flow of air to the generator.

11. The apparatus of claim 9, wherein the control device is a stepper motor operably connected to the air flow control member to change the position of the air flow control member to alter the flow of air to the generator.

12. The apparatus of claim 8, wherein the first control is a user programmable device.

13. The apparatus of claim 8, wherein the second control is a user programmable device.

14. The apparatus of claim 8, wherein the controller includes a user programmable control for regulating the duration of operation of the device.

15. The apparatus of claim 8, wherein the generator includes at least one movable member operable to generate air pressure and high frequency air pulses, said motor being operatively associated with the movable member to move the movable member to generate air pressure and high frequency air pulses.

16. The apparatus of claim 8, wherein the generator includes first and second movable members operable to generate air pressure and high frequency air pulses, said motor being operatively connected to the first and second movable members to move the first and second movable members to generate air pressure and high frequency air pulses.

17. A method of applying pressure and high frequency pulses to the body of a person, the method comprising:

locating a garment having an air core adjacent a portion of the body of a person to be subjected to pressure and high frequency pulses,

generating air pressure and high frequency air pulses with a generator for producing air pressure and high frequency air pulses,

transferring the air pressure and high frequency air pulses to the air core of the garment whereby pressure and high frequency pulses are applied to the body of the person,

drivably connecting the generator to a motor used to operate the generator to produce the air pressure and high frequency air pressure pulses,

restricting the flow of air to the generator to regulate the air pressure produced by the generator with a valve having an air flow control member operable to alter the flow of air to the generator,

drivably connecting the air flow control member to a control device to operate the air flow control member to alter the flow of air to the generator and air pressure produced by the generator,

regulating the operation of the motor and control device to manage the time duration of operation of the generator, the high frequency of the air pulses and the air pressure produced by the generator, and

providing a user programmable control to maintain a selected air pressure produced by the generator responsive to changes in the frequency of the air pulses produced by the generator.

18. The method of claim 17 including: providing a user programmable control for regulating the time of operation of the motor and the time duration of the production of air pressure and high frequency air pressure pulses by the generator.

19. The method of claim 17 including: providing a user programmable control for regulating the speed of the motor to regulate the high frequency of the air pulses produced by the generator.

20. The method of claim 17 including: providing the user programmable control for regulating the air pressure produced by the device with a motor speed and air pressure lookup data table for controlling the operation of the control device to maintain a selected air pressure produced by the device when the speed of the first motor and high frequency air pulses are changed.

21. The method of claim 17 including:

providing a first user programmable control for regulating the speed of the first motor to regulate the high frequency of the air pulses produced by the device,

providing a second user programmable control for regulating the air pressure produced by the device with a motor speed and air pressure lookup table for controlling the operation of the control device to regulate the air pressure produced by the generator to maintain a selected air pressure produced by the generator when the speed of the motor and high frequency air pulses are changed.