

U.S. Patent No. 8,858,534 – Claim Listing

Claim No.	Limitation
1[pre]	A vacuum system for applying negative pressure to a wound, the vacuum system comprising:
1[a]	an enclosure, a venting arrangement, a tube, a vacuum source, and a controller:
1[b]	the enclosure being attachable to a periphery of the wound so as to define a confined volume;
1[c]	the enclosure having an enclosure outlet connectable to said vacuum source via said tube so that negative pressure can be selectively created in said volume;
1[d]	the venting arrangement comprising a flow restrictor to restrict flow through said venting arrangement and to thereby provide a controlled flow of ambient air into said vacuum system upstream of the vacuum source;
1[e]	the controller configured for controlling operation of the vacuum source while providing venting of the vacuum system via said venting arrangement to provide a desired level of said negative pressure in said confined volume.
2	The vacuum system according to claim 1, wherein said flow restrictor is provided in any one of the enclosure or the tube.
3	The vacuum system according to claim 1, further comprising a sensor for enabling determination of a level of said negative pressure in said confined volume.
4	The vacuum system according to claim 1, further comprising a waste container in fluid communication with said vacuum source.
5	The vacuum system according to claim 1, wherein said vacuum source comprises a vacuum pump driven by a motor.
6[pre]	The vacuum system according to claim 5,
6[a]	wherein said motor is an electric motor,
6[b]	and said controller controls operation of said motor to thereby provide a desired level of said negative pressure in said confined volume.
7	The vacuum system according to claim 6, wherein said controller controls the electric current or the voltage of said motor to control said level of said negative pressure in said

Claim No.	Limitation
	confined volume.
8	The vacuum system according to claim 6, wherein said controller controls the torque of said motor to control said level of said negative pressure in said confined volume.
9	The vacuum system according to claim 1, wherein ambient pressure may be restored in said confined volume via said venting arrangement when said vacuum pump is not operating.
10	The vacuum system according to claim 1, wherein said venting arrangement comprises at least one of: one or more bleeding holes; a porous body; an orifice.
11[pre]	A vacuum system for applying negative pressure to a wound, the vacuum system comprising:
11[a]	an enclosure, a venting arrangement, a tube, a vacuum source, and a controller:
11[b]	the enclosure being attachable to a periphery of the wound so as to define a confined volume;
11[c]	the enclosure having an enclosure outlet connectable to said vacuum source via said tube so that negative pressure can be selectively created in said volume,
11[d]	said venting arrangement located outside said enclosure and comprising a flow restrictor to restrict flow through said venting arrangement and to thereby provide a controlled flow of ambient air into said tube,
11[e]	said controlled flow of ambient air entering said tube via said venting arrangement without entering said enclosure;
11[f]	the controller configured for controlling operation of the vacuum source while said tube is being vented via said venting arrangement to provide a desired level of said negative pressure in said confined volume.
12	The vacuum system according to claim 11, further comprising a sensor for enabling determination of a level of said negative pressure in said confined volume.
13	The vacuum system according to claim 11, further comprising a waste container in fluid communication with said vacuum source.
14	The vacuum system according to claim 11, wherein said

Claim No.	Limitation
	vacuum source comprises a vacuum pump driven by a motor.
15	The vacuum system according to claim 14, wherein said motor is an electric motor, and said controller controls operation of said motor to thereby provide a desired level of said negative pressure in said confined volume.
16	The vacuum system according to claim 15, wherein said controller controls at least one of the electric current of said motor, or the voltage of said motor, or the torque of said motor to control said level of said negative pressure in said confined volume.
17	The vacuum system according to claim 11, wherein ambient pressure may be restored in said confined volume via said venting arrangement when said vacuum pump is not operating.
18	The vacuum system according to claim 11, wherein said venting arrangement comprises at least one of: one or more bleeding holes; a porous body; an orifice.
19[pre]	A method for applying negative pressure to a wound, comprising:
19[a]	(a) providing a vacuum system comprising at least: an enclosure, a venting arrangement, a tube, and a vacuum source:
19[b]	the enclosure being attachable to a periphery of the wound so as to define a confined volume;
19[c]	the enclosure having an enclosure outlet connectable to said vacuum source via said tube so that negative pressure can be selectively created in said volume;
19[d]	the venting arrangement comprising a flow restrictor to restrict flow through said venting arrangement and to thereby provide a controlled flow of ambient air into said system upstream of the vacuum source;
19[e]	(b) controlling operation of the vacuum source while the vacuum system is being vented via the venting arrangement to thereby provide a desired level of said negative pressure in said confined volume.
20[pre]	The method according to claim 19,
20[a]	wherein the vacuum source comprises a vacuum pump driven by an electric motor,

Claim No.	Limitation
20[b]	and wherein step (b) comprises controlling operation of said motor to thereby provide a desired level of said negative pressure in said confined volume.
21	The method according to claim 20, wherein step (b) comprises controlling at least one of the electric current, or the voltage, or the torque of said motor to control said level of said negative pressure in said confined volume.
22	The method according to claim 19, wherein said venting arrangement comprises at least one of: one or more bleeding holes; a porous body; an orifice.