## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for conditioning the temperature of at
least one fluid stream that is passed through a fuel cell stack, the system comprising:
a system module disposed upstream of the fuel cell stack and operable to
humidify the fluid stream so that the fluid stream reaches a predetermined humidity level and the
predetermined humidity level corresponds to a predetermined temperature an anode stream and a
cathode stream;
at least one inlet of the a fuel cell stack adapted to receive the fluid anode stream
at a first temperature that is different from the predetermined temperature and the cathode
stream, the fuel cell stack having at least one outlet that is operable to present provides coolant
having a temperature that is different from the first temperature of the fluid stream in response to
receiving the fluid stream the anode stream and the cathode stream; and
a conditioning device operable to receive the fluid stream and anode stream, the
cathode stream, and the coolant and present the coolant to the fluid stream to change the first
temperature of the fluid stream to be equal to the predetermined temperature or within a
specified range thereof so that the inlet of the fuel cell stack receives the fluid stream at the
predetermined temperature or within the specified range thereof to change the temperature of the
anode stream and the cathode stream with the coolant, the conditioning device comprising:
an outer shell having first and second ends and the outer shell defining a
cavity therein for receiving the coolant; and
at least one pipe extending through the cavity and between the ends to
enclose and to deliver the fluid stream from the system module to the fuel cell stack
an outer shell defining a cavity therein;
a first pipe extending through the cavity to deliver the anode stream to the fuel
cell stack at a first temperature;
a second pipe extending through the cavity to deliver the cathode stream to the

fuel cell stack at a second temperature; and

an input port coupled to the outer shell to deliver the coolant from the fuel cell stack to the first pipe and to the second pipe to change the first temperature of the anode stream and the second temperature of the cathode stream.

## 2-21. (Canceled)

22. (Currently Amended) An apparatus in a system for conditioning the temperature a temperature of at least one fluid stream that is passed through a fuel cell stack, the system including a system module operable to humidify the fluid stream so that the fluid stream reaches a predetermined humidity level that corresponds to a predetermined temperature an anode stream and a cathode stream and at least one inlet of the a fuel cell stack adapted to receive the fluid stream at a first temperature that is different from the predetermined temperature anode stream and the cathode stream and to provide coolant, the apparatus comprising:

a conditioning device operable to receive the <u>fluid stream anode stream</u>, the cathode stream and the coolant, the coolant having a temperature that is different from the first temperature of the fluid stream and being further operable to present the coolant to the fluid stream to change the first temperature of the fluid stream to be substantially similar to the predetermined temperature so that the inlet of the fuel cell stack receives the fluid stream at the substantially similar predetermined temperature to change a temperature of the anode stream and the cathode stream with the coolant, the conditioning device comprising:

an outer shell having first and second ends and the outer shell

an outer shell having first and second ends and the outer shell defining a cavity therein for receiving the coolant; and

at least one pipe for extending through the coolant in the cavity between the ends and for delivering the fluid stream from the conditioning device

an outer shell defining a cavity therein;

a first pipe extending through the cavity to deliver the anode stream to a fuel cell stack at a first temperature;

a second pipe extending through the cavity to deliver the cathode stream to the fuel cell stack at a second temperature; and

an input port being coupled to the outer shell to receive the coolant and to deliver the coolant into the cavity to change the first temperature of the anode stream and the second temperature of the cathode stream.

## 23-26. (Canceled)

27. (Currently Amended) An apparatus in a system for conditioning the temperature of at least one fluid stream that is passed through a fuel cell stack, the system including a system module operable to humidify the fluid stream so that the fluid stream reaches a predetermined humidity level that corresponds to a predetermined temperature and at least one inlet of the an anode stream and a cathode stream and a fuel cell stack adapted to receive the fluid stream at a first temperature that is different from the predetermined temperature the anode stream and the cathode stream and to provide coolant, the apparatus comprising:

a conditioning device operable to receive the <u>fluid stream\_anode stream</u>, the cathode stream and the coolant, the coolant having a temperature that is different from the first temperature of the fluid stream and being further operable to present the coolant to the fluid stream to change the first temperature of the fluid stream to be substantially similar to the predetermined temperature so that the inlet of the fuel cell stack receives the fluid stream at the substantially similar predetermined temperature and to change a temperature of the anode stream and the cathode stream with the coolant, the conditioning device comprising:

an outer shell having first and second ends defining a cavity therein for receiving the coolant; and

at least one pipe extending through the cavity and between the ends and for passing the fluid stream through the coolant in the cavity an outer shell forming a cavity;

a first pipe extending through the cavity to deliver the anode stream at a first temperature;

an input port coupled to the outer shell to deliver coolant to the first pipe to change the first temperature of the anode stream; and

a temperature sensor positioned on an exterior of the outer shell and in fluid communication with the anode stream to measure the first temperature.

28-30. (Canceled)

- 31. (New) The system of claim 1 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the conditioning device.
- 32. (New) The system of claim 1 wherein the conditioning device further comprises a first temperature sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure the first temperature.
- 33. (New) The system of claim 32 wherein the first temperature sensor is configured to transmit a temperature signal indicative of the measured first temperature to a controller to control an amount of coolant that is delivered to the first pipe.
- 34. (New) The system of claim 32 wherein the conditioning device further comprises a second temperature sensor positioned on the exterior section of outer shell and being in fluid communication with the cathode stream in the second pipe to measure the second temperature.
- 35. (New) The system of claim 34 wherein the second temperature sensor is configured to transmit a temperature signal indicative of the measured second temperature to a controller to control an amount of coolant that is delivered to the second pipe.
- 36. (New) The system of claim 1 wherein the conditioning device further comprises a first humidity sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure an amount of water within the anode stream.

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- 37. (New) The system of claim 36 wherein the conditioning device further comprises a second humidity sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure an amount of water within the cathode stream.
- 38. (New) The system of claim 1 wherein the conditioning device is positioned exterior to the fuel cell stack.
- 39. (New) The system of claim 1 wherein the conditioning device is positioned interior to the fuel cell stack.
- 40. (New) The apparatus of claim 22 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the conditioning device.
- 41. (New) The apparatus of claim 22 wherein the conditioning device further comprises a first temperature sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure the first temperature.
- 42. (New) The apparatus of claim 41 wherein the first temperature sensor is configured to transmit a temperature signal indicative of the measured first temperature to a controller to control an amount of coolant that is delivered to the first pipe.
- 43. (new) The apparatus of claim 41 wherein the conditioning device further comprises a second temperature sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure the second temperature thereof.

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- 44. (New) The apparatus of claim 43 wherein the second temperature sensor is configured to transmit a temperature signal indicative of the measured second temperature to a controller to control an amount of coolant that is delivered to the second pipe.
- 45. (New) The apparatus of claim 22 wherein the conditioning device further comprises a first humidity sensor positioned on an exterior section of the outer shell and being in fluid communication with the anode stream in the first pipe to measure an amount of water within the anode stream.
- 46. (New) The apparatus of claim 45 wherein the conditioning device further comprises a second humidity sensor positioned on the exterior section of the outer shell and being in fluid communication with the cathode stream in the second pipe to measure an amount of water within the cathode stream.
- 47. (New) The apparatus of claim 27 wherein the conditioning device further comprises an output port coupled to the outer shell to deliver the coolant away from the device.