

Amendments to the Claims:

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

1- 30. (canceled)

31. (new) A conditioning device for conditioning a temperature of an anode stream and a cathode stream that are delivered to a fuel cell stack, the device comprising:

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 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.

32. (new) The conditioning device of claim 31 further comprising an output port coupled to the outer shell to deliver the coolant away from the conditioning device.

33. (new) The conditioning device of claim 31 further comprising 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.

34. (new) The conditioning device of claim 33 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.

35. (new) The conditioning device of claim 33 further comprising 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.

36. (new) The conditioning device of claim 35 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.

37. (new) The conditioning device of claim 31 further comprising 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.

38. (new) The conditioning device of claim 37 further comprising 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.

39. (new) The conditioning device of claim 31 wherein the conditioning device is positioned exterior to the fuel cell stack.

40. (new) The conditioning device of claim 31 wherein the conditioning device is positioned interior to the fuel cell stack.

41. (new) A conditioning device comprising:
an outer shell defining a cavity therein;
a first pipe extending through the cavity to deliver an anode stream to a fuel cell stack at a first temperature;
a second pipe extending through the cavity to deliver a cathode stream to the fuel cell stack at a second temperature; and

an input port being coupled to the outer shell to receive 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.

42. (new) The conditioning device of claim 41 further comprising an output port coupled to the outer shell to deliver the coolant away from the conditioning device.

43. (new) The conditioning device of claim 41 further comprising 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.

44. (new) The conditioning device of claim 43 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.

45. (new) The conditioning device of claim 43 further comprising 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.

46. (new) The conditioning device of claim 45 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.

47. (new) The conditioning device of claim 41 further comprising 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.

48. (new) The conditioning device of claim 47 further comprising 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.

49. (new) A device comprising:
an outer shell forming a cavity;
a first pipe extending through the cavity to deliver an 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.

50. (new) The cooling device of claim 49 further comprising an output port coupled to the outer shell to deliver the coolant away from the device.