

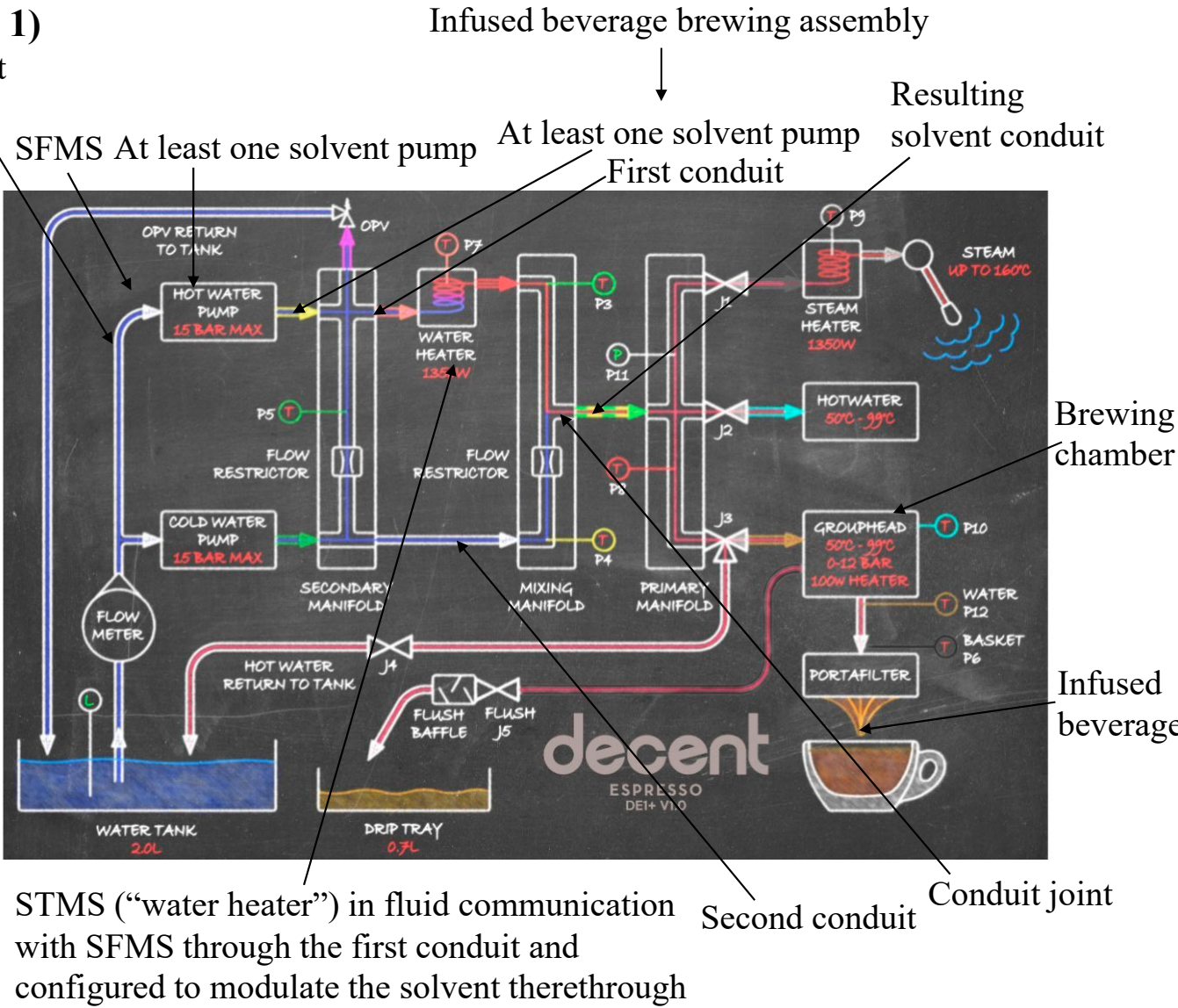
Claim Chart for the 456 Patent (Slide 1)

1. An infused beverage brewing assembly comprising:

a solvent flow management system (SFMS) with at least one solvent pump operably configured to receive a solvent and induce a flow of the solvent through a first solvent conduit and a second solvent conduit;

a solvent temperature modulation system (STMS) in fluid communication with the solvent flow management system and operably configured to thermally modulate the solvent disposed within the first solvent conduit to a raised temperature higher and different than a temperature of the solvent disposed within the second solvent conduit, the first and second solvent conduits directly coupled together to form a conduit joint downstream of the solvent temperature modulation system to form a resulting solvent conduit with a resulting solvent disposed therein at a resulting temperature;

a brewing chamber in fluid communication with the resulting solvent conduit and for housing a solute disposed to receive the resulting solvent to produce an infused beverage;



Claim Chart for the 456 Patent (Slide 2)

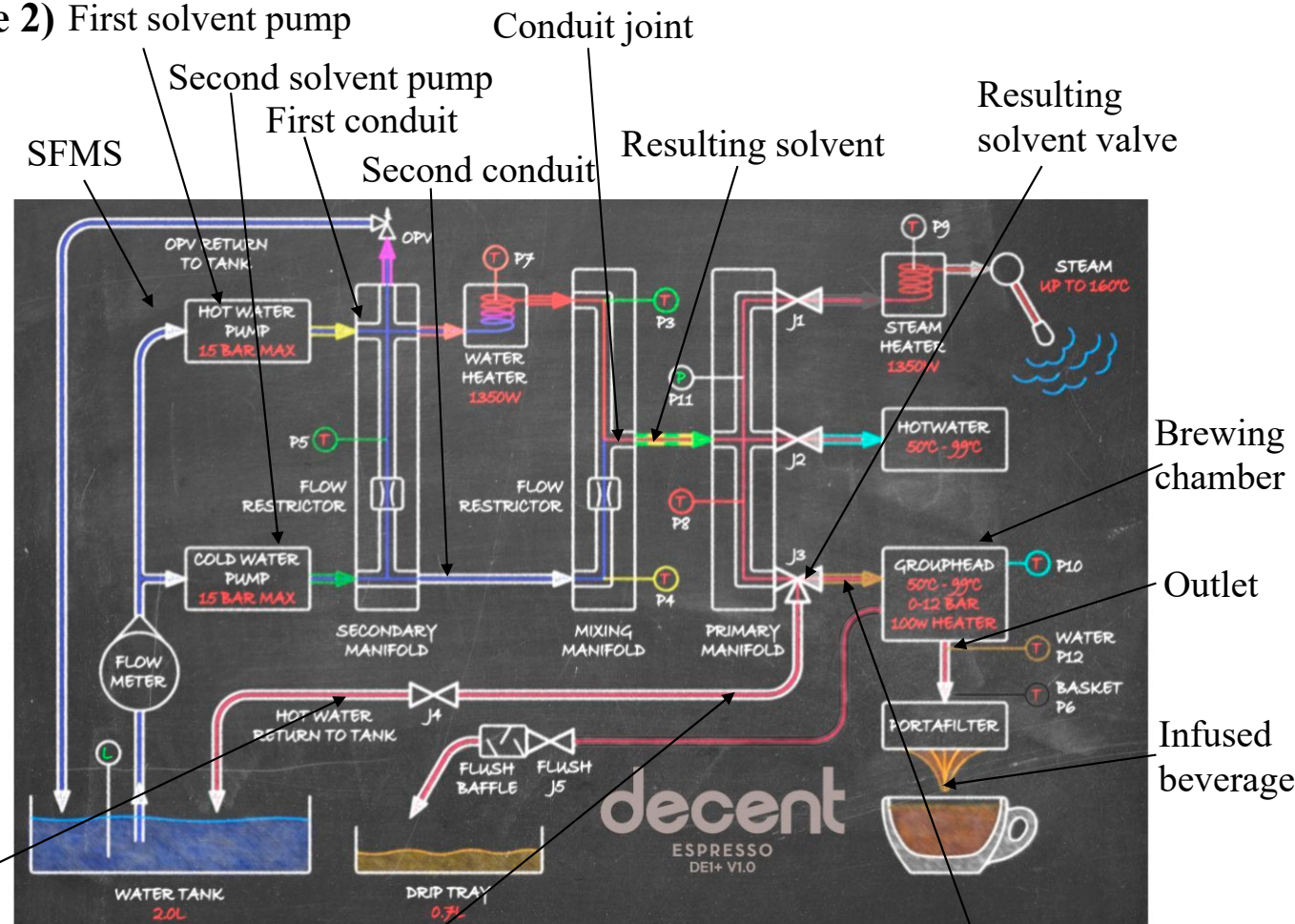
an outlet for discharging the infused beverage; and

a resulting solvent valve disposed upstream of the brewing chamber, downstream of the conduit joint, and in fluid communication with the solvent conduit, the valve operably configured to selectively have a closed state inhibiting flow of the resulting solvent to the brewing chamber and an active state that includes a first selective directional flow path directing the flow of the resulting solvent to a removal conduit without passing the resulting solvent through the brewing chamber and a second selective directional flow path directing the flow of the resulting solvent to the brewing chamber, thereby enabling resulting solvent delivered to the brewing chamber at a desired temperature.

Removal conduit

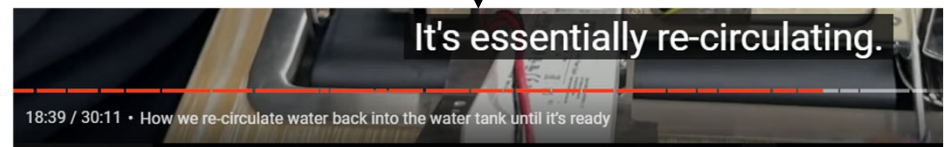
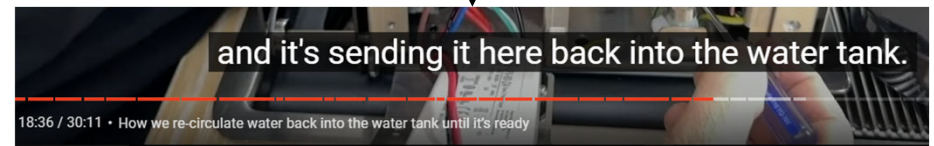
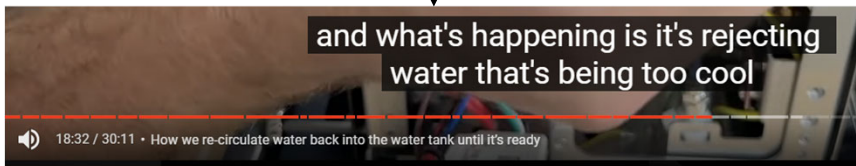
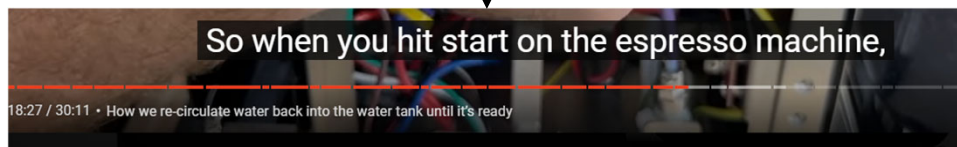
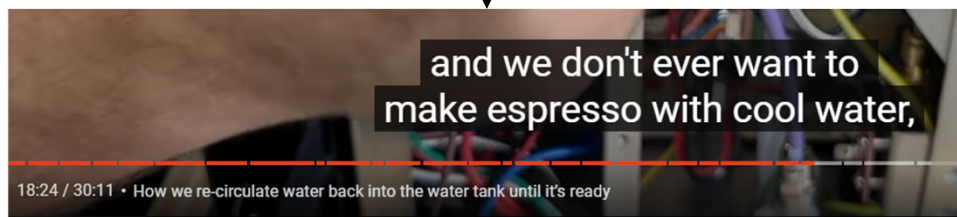
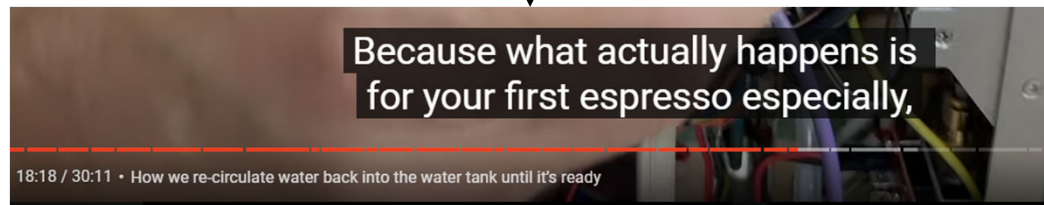
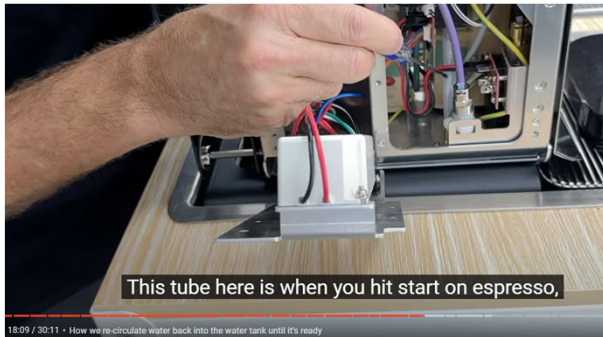
Valve in closed state causes resulting solvent to be returned to tank instead of brewing chamber if not at a desired temperature

Valve in active state causes resulting solvent to be delivered to brewing chamber at desired temperature



Continued on Slide # 3

Claim Chart for the 456 Patent (Slide 3)

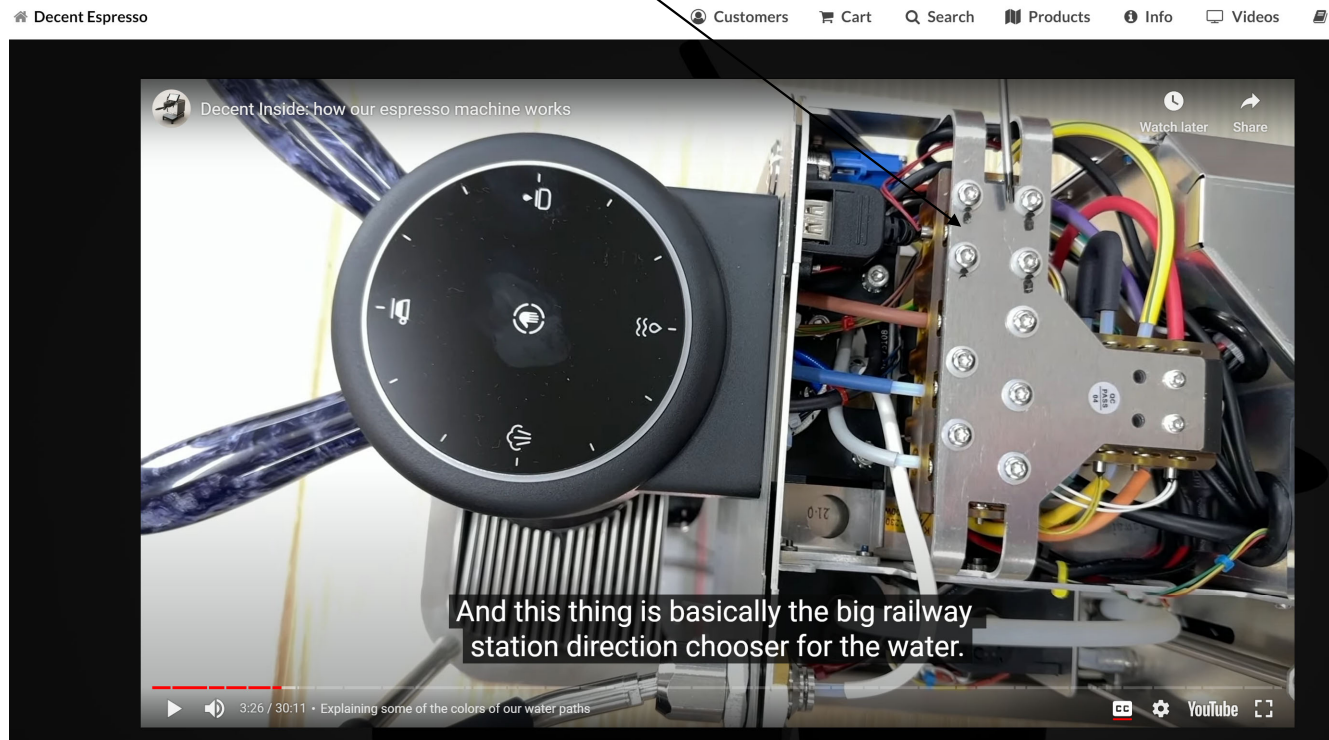


Claim Chart for the 456 Patent (Slide 4)

Primary manifold directing with valves to direct where resulting solvent flows

an outlet for discharging the infused beverage; and

a resulting solvent valve disposed upstream of the brewing chamber, downstream of the conduit joint, and in fluid communication with the solvent conduit, the valve operably configured to selectively have a closed state inhibiting flow of the resulting solvent to the brewing chamber and an active state that includes a first selective directional flow path directing the flow of the resulting solvent to a removal conduit without passing the resulting solvent through the brewing chamber and a second selective directional flow path directing the flow of the resulting solvent to the brewing chamber, thereby enabling resulting solvent delivered to the brewing chamber at a desired temperature.

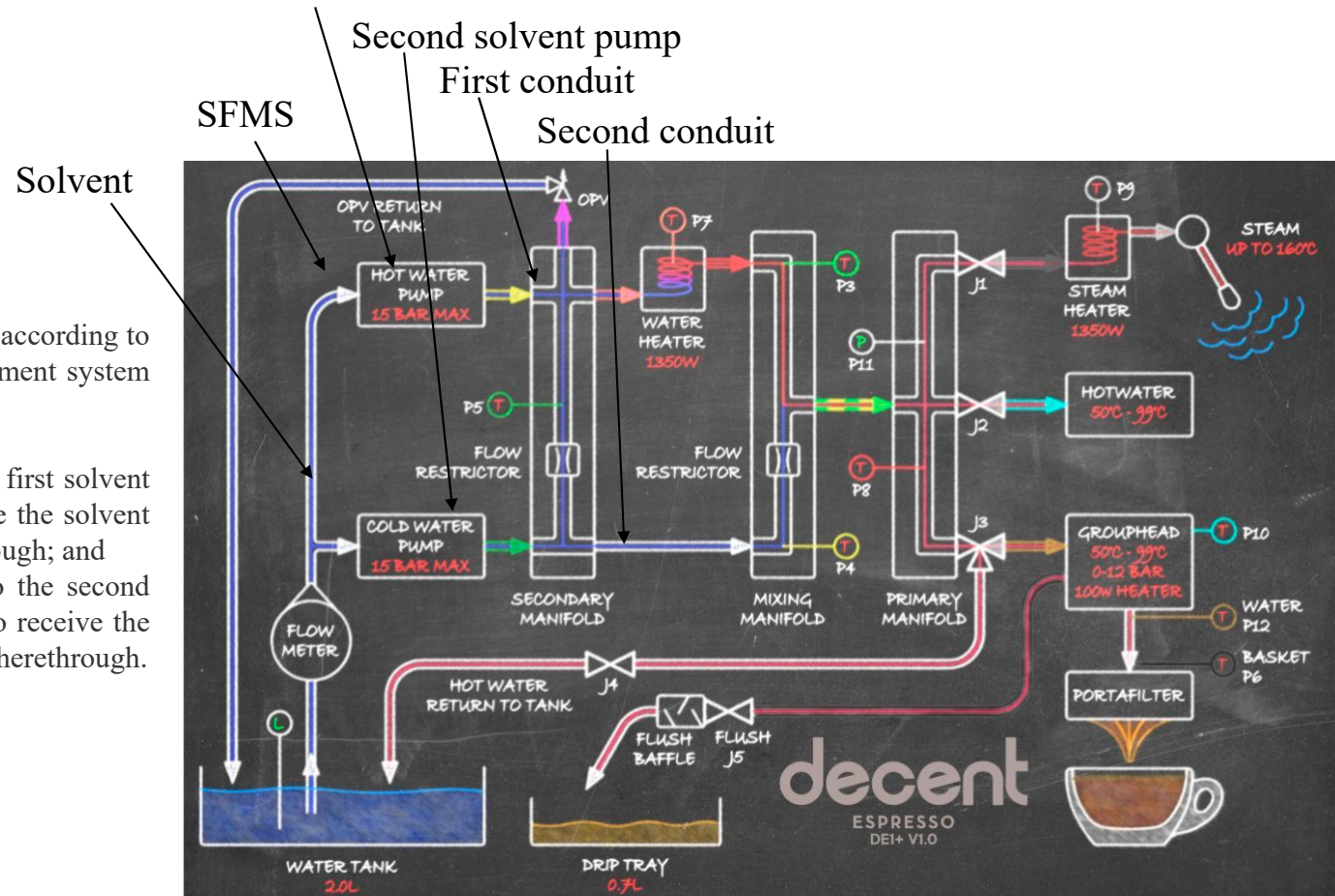


See <https://decentespresso.com/>

Claim Chart for the 456 Patent (Slide 5) First solvent pump

2. The infused beverage brewing assembly according to claim 1, wherein the solvent flow management system further comprises:

a first solvent pump fluidly coupled to the first solvent conduit and operably configured to receive the solvent and induce the flow of the solvent therethrough; and
a second solvent pump fluidly coupled to the second solvent conduit and operably configured to receive the solvent and induce the flow of the solvent therethrough.

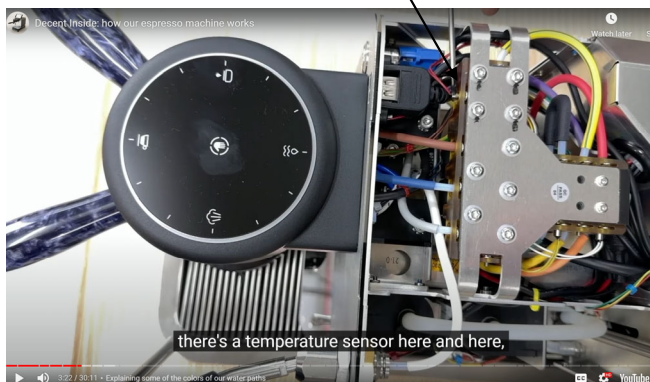


Claim Chart for the 456 Patent (Slide 6) First solvent pump

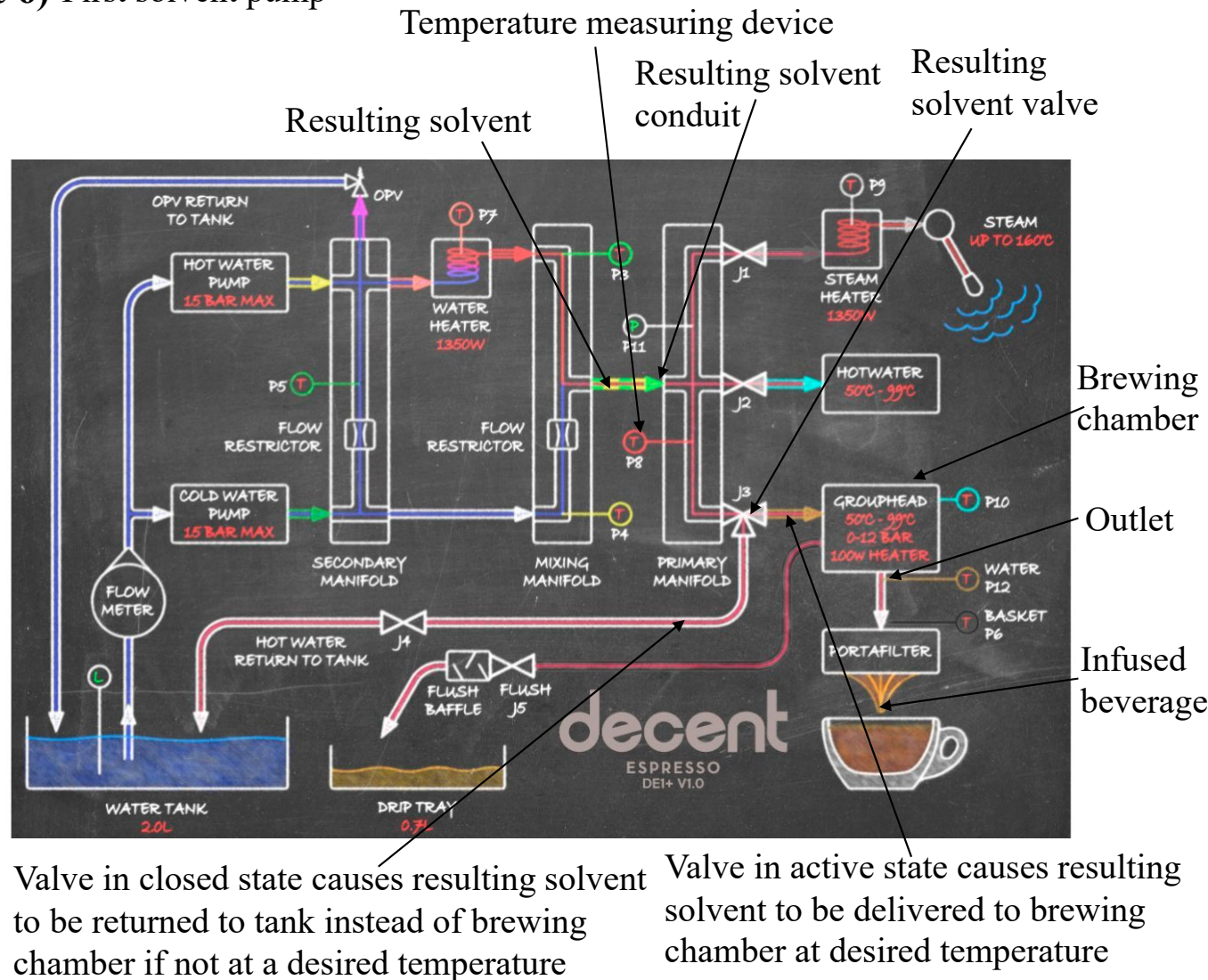
3. The infused beverage brewing assembly according to claim 1, further comprising:

a temperature measuring device coupled to and in fluid communication with the resulting solvent conduit and operably configured to measure the resulting solvent temperature and communicate the resulting solvent temperature to an electronic controller.

Temperature measuring device



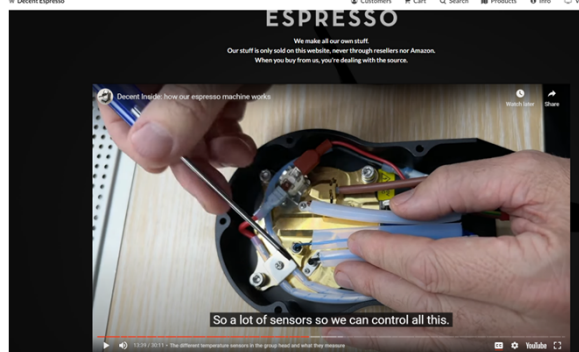
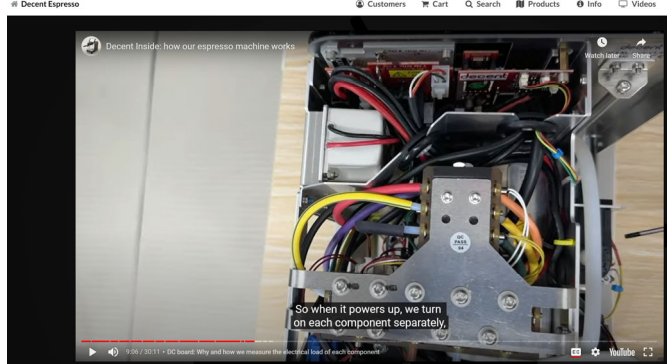
See <https://decentespresso.com/>



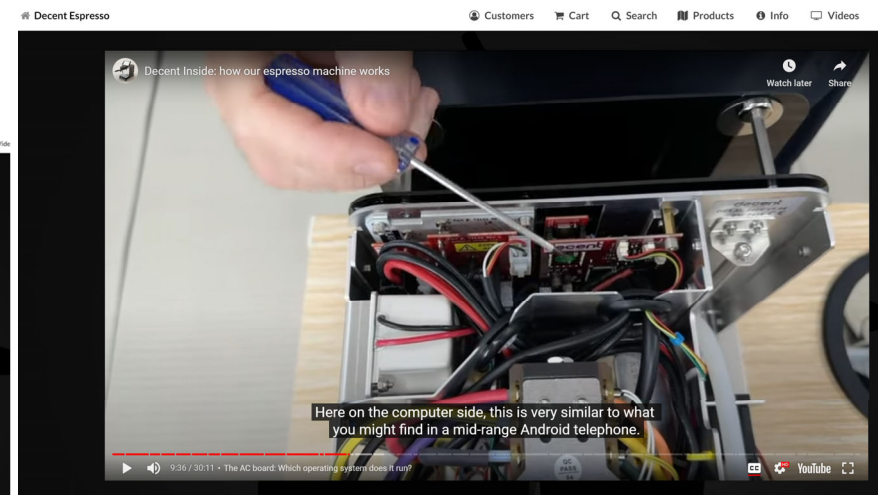
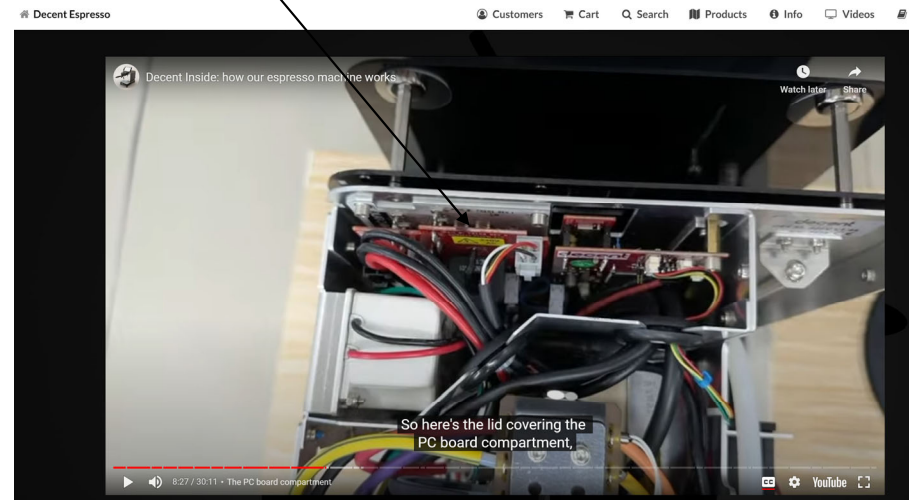
Claim Chart for the 456 Patent (Slide 7)

3. The infused beverage brewing assembly according to claim 1, further comprising:

a temperature measuring device coupled to and in fluid communication with the resulting solvent conduit and operably configured to measure the resulting solvent temperature and communicate the resulting solvent temperature to an electronic controller.



Electronic controller on PC boards that control all components in the assembly

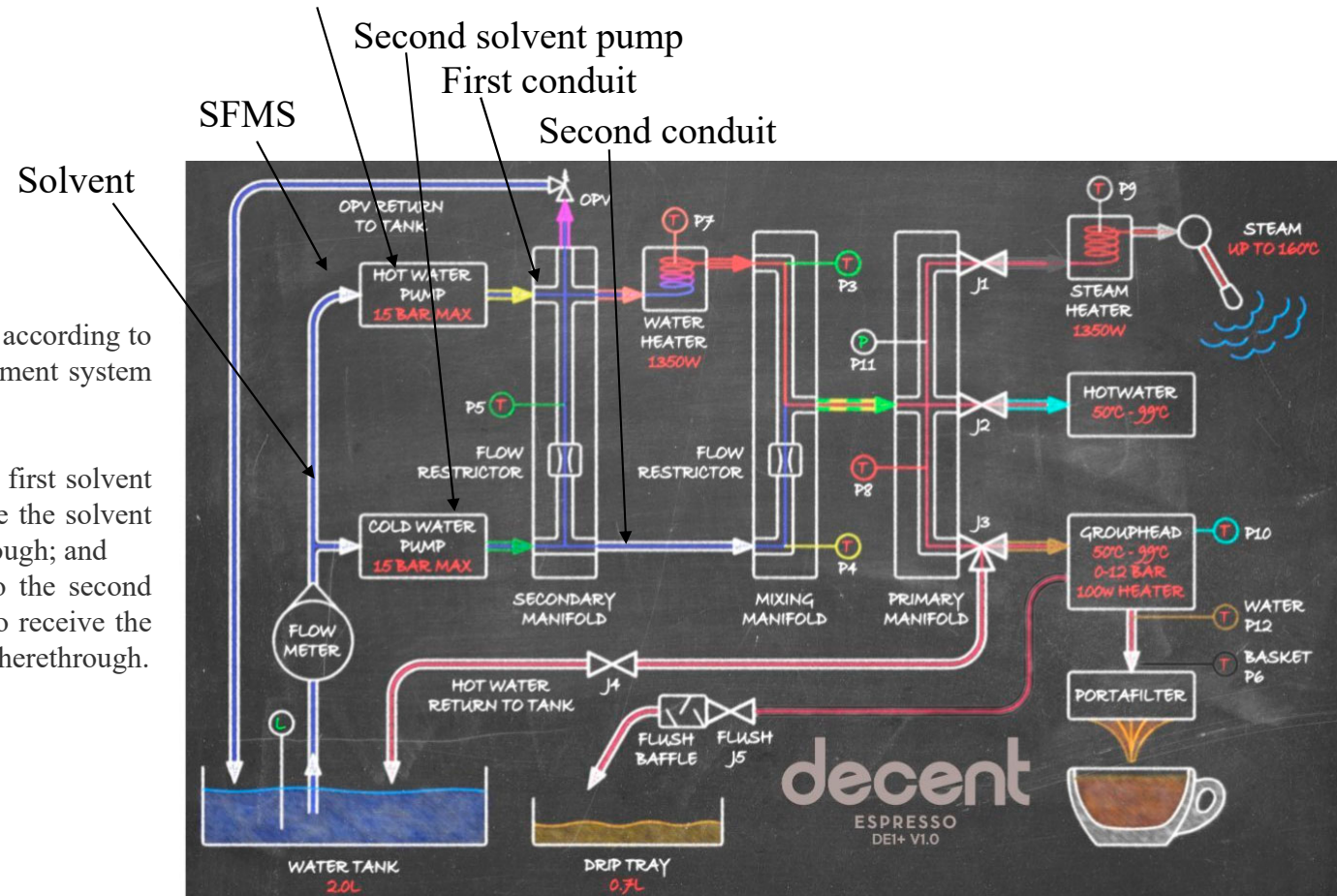


See <https://decentespresso.com/>

Claim Chart for the 456 Patent (Slide 8) First solvent pump

4. The infused beverage brewing assembly according to claim 1, wherein the solvent flow management system further comprises:

a first solvent pump fluidly coupled to the first solvent conduit and operably configured to receive the solvent and induce the flow of the solvent therethrough; and
a second solvent pump fluidly coupled to the second solvent conduit and operably configured to receive the solvent and induce the flow of the solvent therethrough.



Claim Chart for the 456 Patent (Slide 9)

5. The infused beverage brewing assembly according to claim 4, wherein:

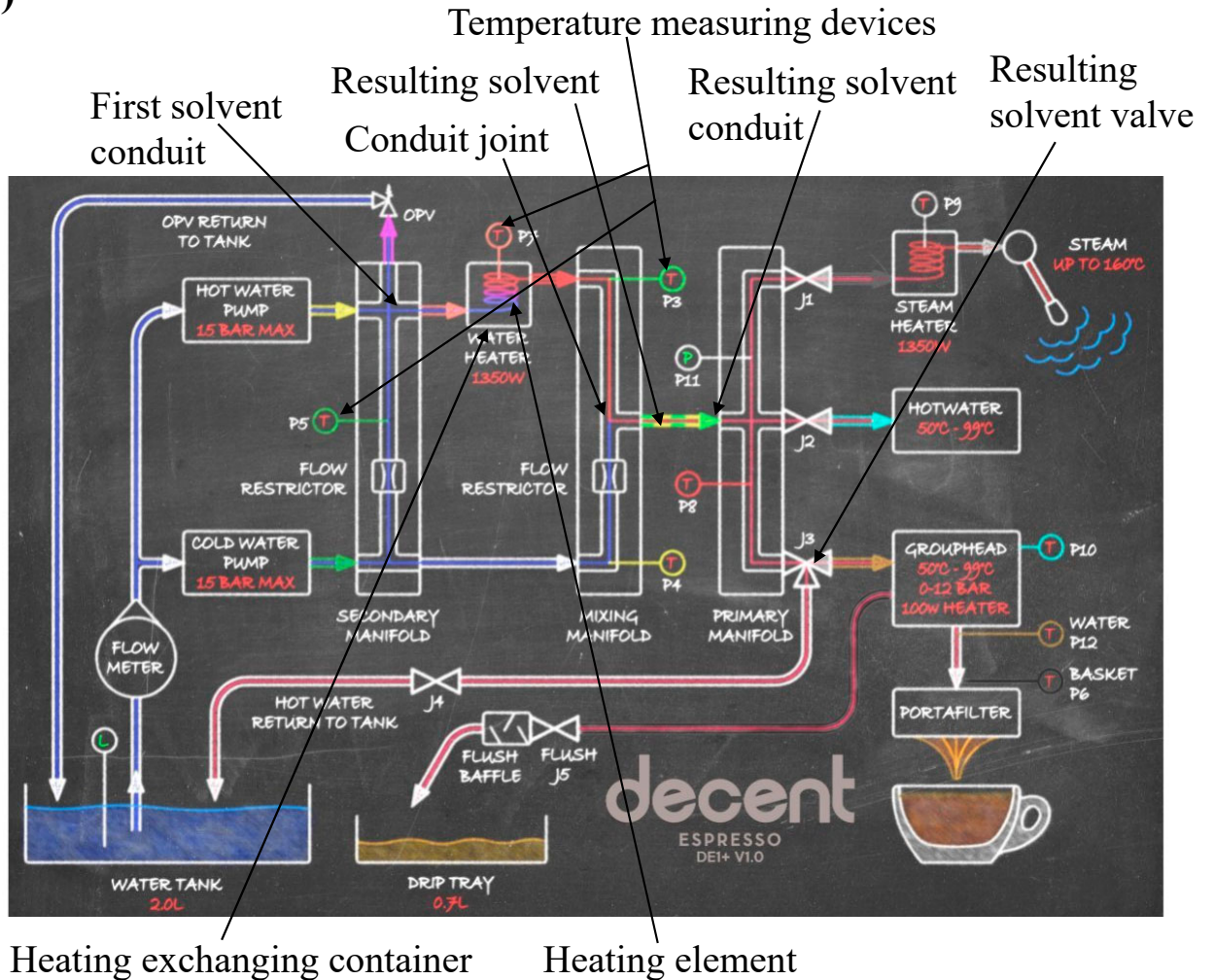
the resulting solvent valve is disposed downstream of the conduit joint, the first solvent conduit having a temperature measuring device coupled thereto, in fluid communication therewith downstream of the solvent temperature management system, and communicatively coupled to the electronic controller [see slide #6], the electronic controller operably configured to send a control signal to the solvent temperature management system to dynamically and thermally modulate the solvent disposed within the first solvent conduit to the raised temperature when receiving a temperature from the temperature measuring device coupled to the first solvent conduit [see slide #6].

6. The infused beverage brewing assembly according to claim 4, wherein:

the desired temperature is greater than the resulting solvent temperature [see slide #2-3] .

7. The infused beverage brewing assembly according to claim 6, wherein:

the solvent temperature modulation system is a heating exchanging container having a heating element and solvent disposed therein.



Claim Chart for the 456 Patent (Slide 10)

8. The infused beverage brewing assembly according to claim 7, wherein:

the removal conduit spans from the resulting solvent valve to the heating exchanging container to form a recirculation conduit, the recirculation conduit having a recirculation pump fluidly coupled thereto and operably configured to induce a flow of the resulting solvent to the heating exchanging container.

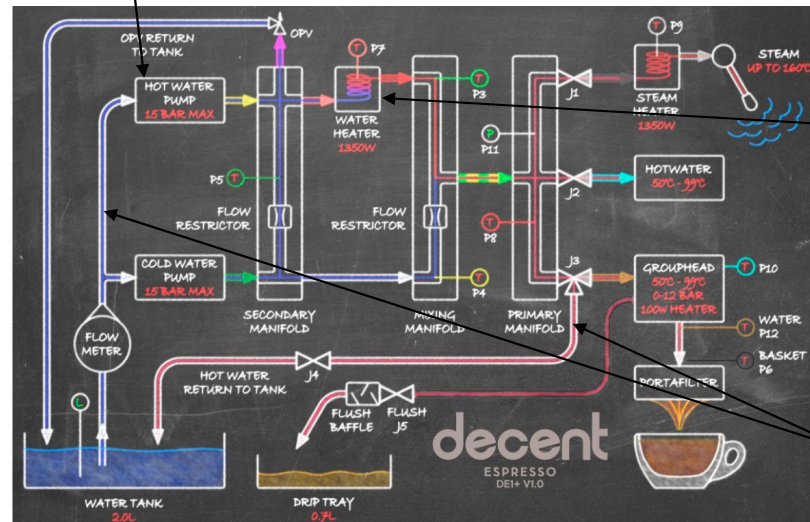
9. The infused beverage brewing assembly according to claim 1, further comprising:

an electronic controller operably configured to send a control signal to the solvent temperature management system to dynamically and thermally modulate the solvent disposed within the first solvent conduit [see slide #6] with respect to a brew parameter that includes at least one of an overall time and dispensed volume of the infused beverage.

10 (not asserted).

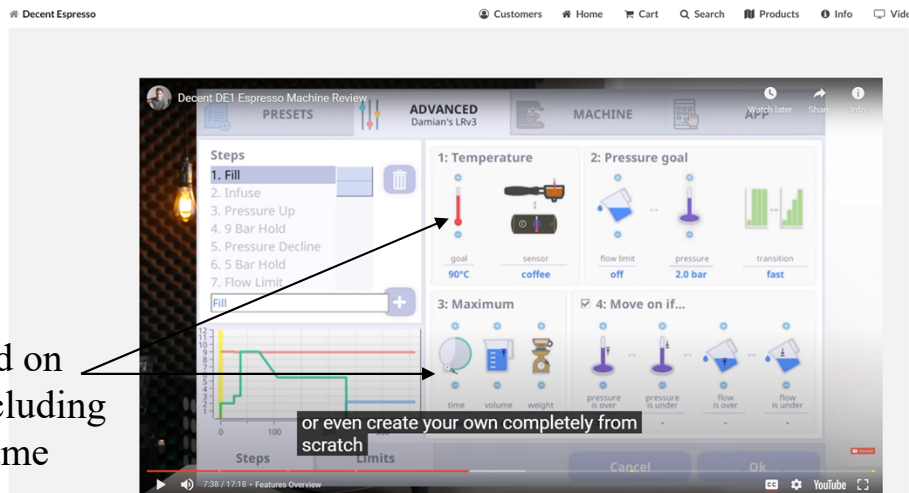
Temperature is adjustable based on various brewing parameters, including overall time and dispensed volume

First solvent pump acting as the recirculation pump



Heating exchanging container

Removal conduit



<https://decentespresso.com/overview>

Claim Chart for the 456 Patent (Slide 11)

11. An infused beverage brewing assembly comprising:

a solvent flow management system (SFMS) with at least one solvent pump operably configured to receive a solvent and induce a flow of the solvent through at least one solvent conduit having a first solvent conduit and a second solvent conduit;

a solvent temperature modulation system (STMS) in fluid communication with the solvent flow management system and operably configured to thermally modulate the solvent disposed within the at least one solvent conduit to a raised temperature;

a brewing chamber in fluid communication with the at least one solvent conduit and for housing a solute disposed to receive the solvent to produce an infused beverage;

Second solvent conduit

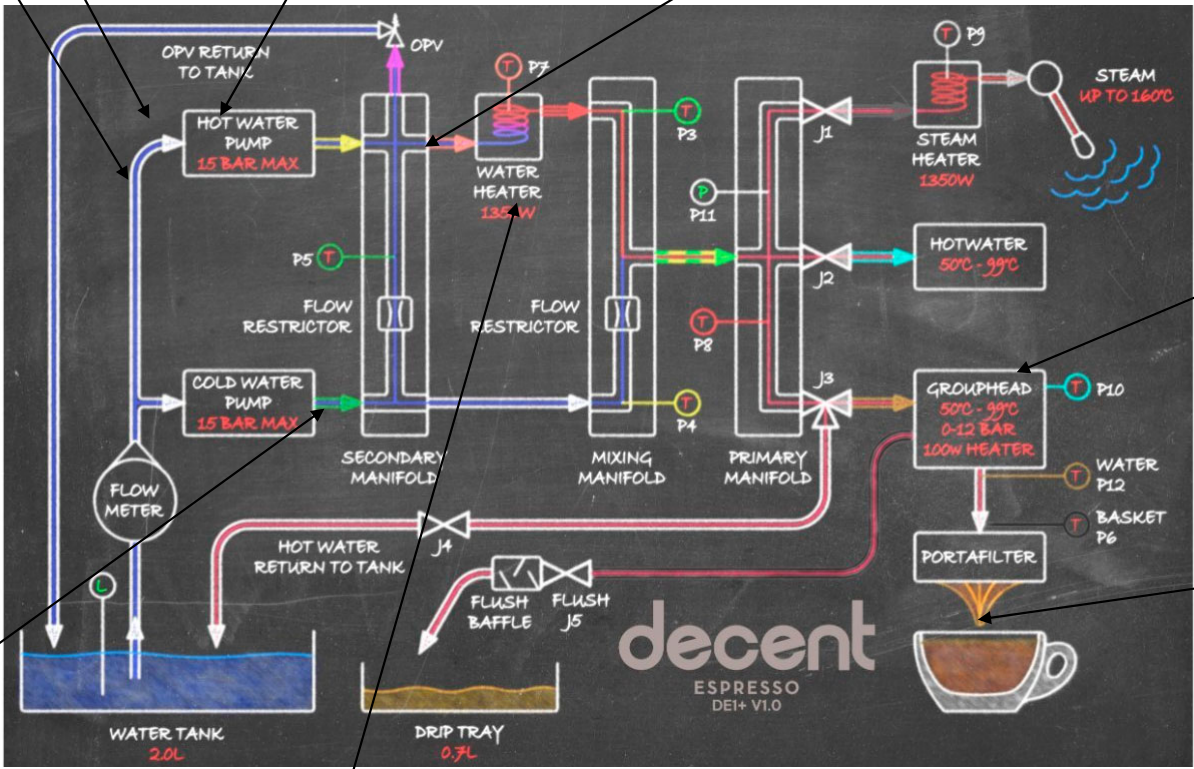
Solvent

SFMS

At least one solvent pump

First solvent conduit

Infused beverage brewing assembly



Brewing chamber

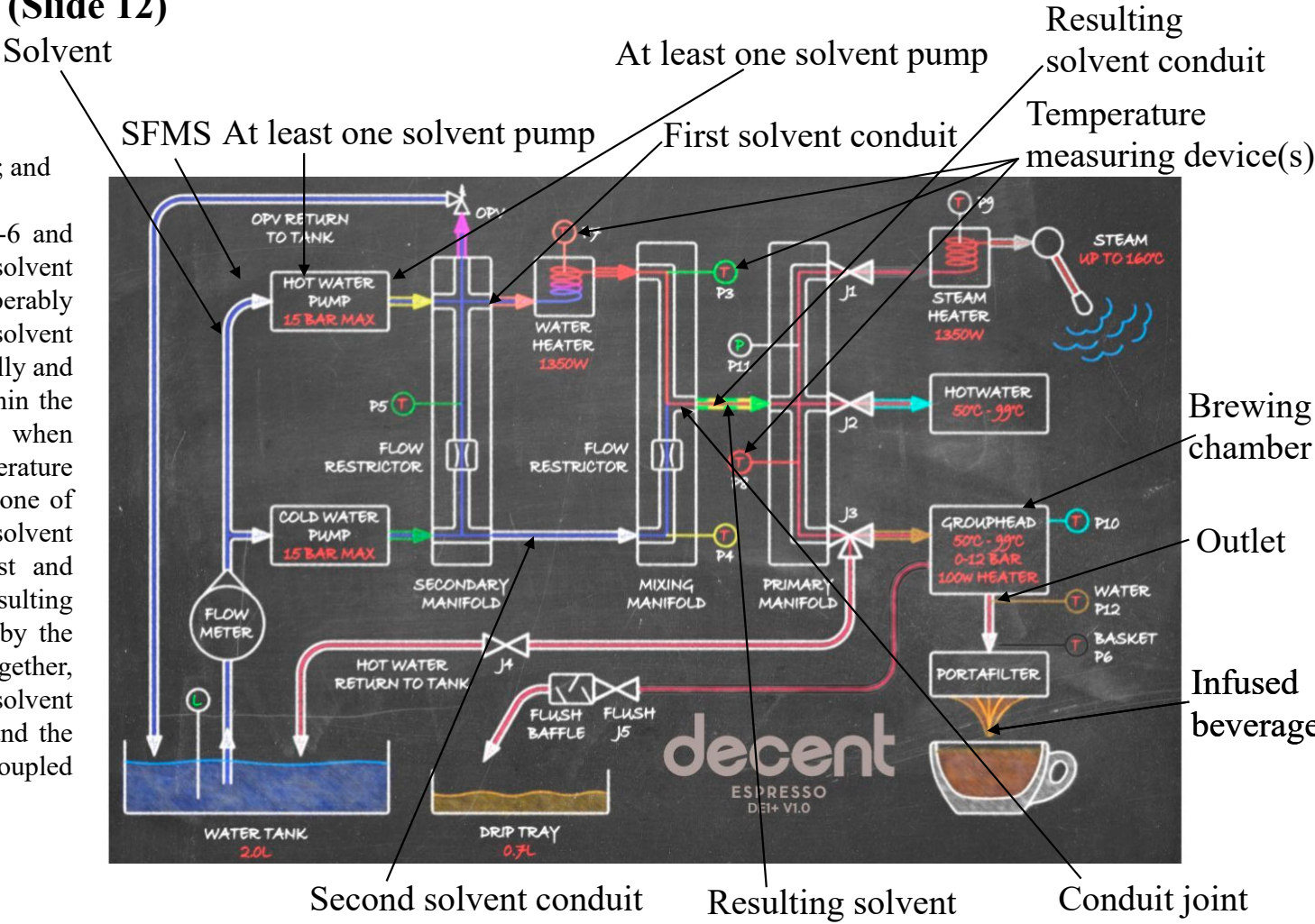
Infused beverage

STMS (“water heater”) in fluid communication with SFMS through the first conduit and configured to modulate the solvent therethrough to a raised temperature

Claim Chart for the 456 Patent (Slide 12)

an outlet for discharging the infused beverage; and

an electronic controller [see also slide #s 5-6 and slide # 12] communicatively coupled to the solvent temperature modulation system and operably configured to send a control signal to the solvent temperature management system to dynamically and thermally modulate the solvent disposed within the first solvent conduit to a raised temperature when receiving a temperature from a temperature measuring device fluidly coupled to at least one of the first solvent conduit downstream of the solvent temperature modulation system by the first and second solvent conduits directly and a resulting solvent conduit and a conduit joint formed by the first and second solvent conduits coupling together, the resulting solvent conduit with a resulting solvent disposed therein at a resulting temperature and the temperature measuring device fluidly coupled upstream of the brewing chamber.



Claim Chart for the 456 Patent (Slide 13)

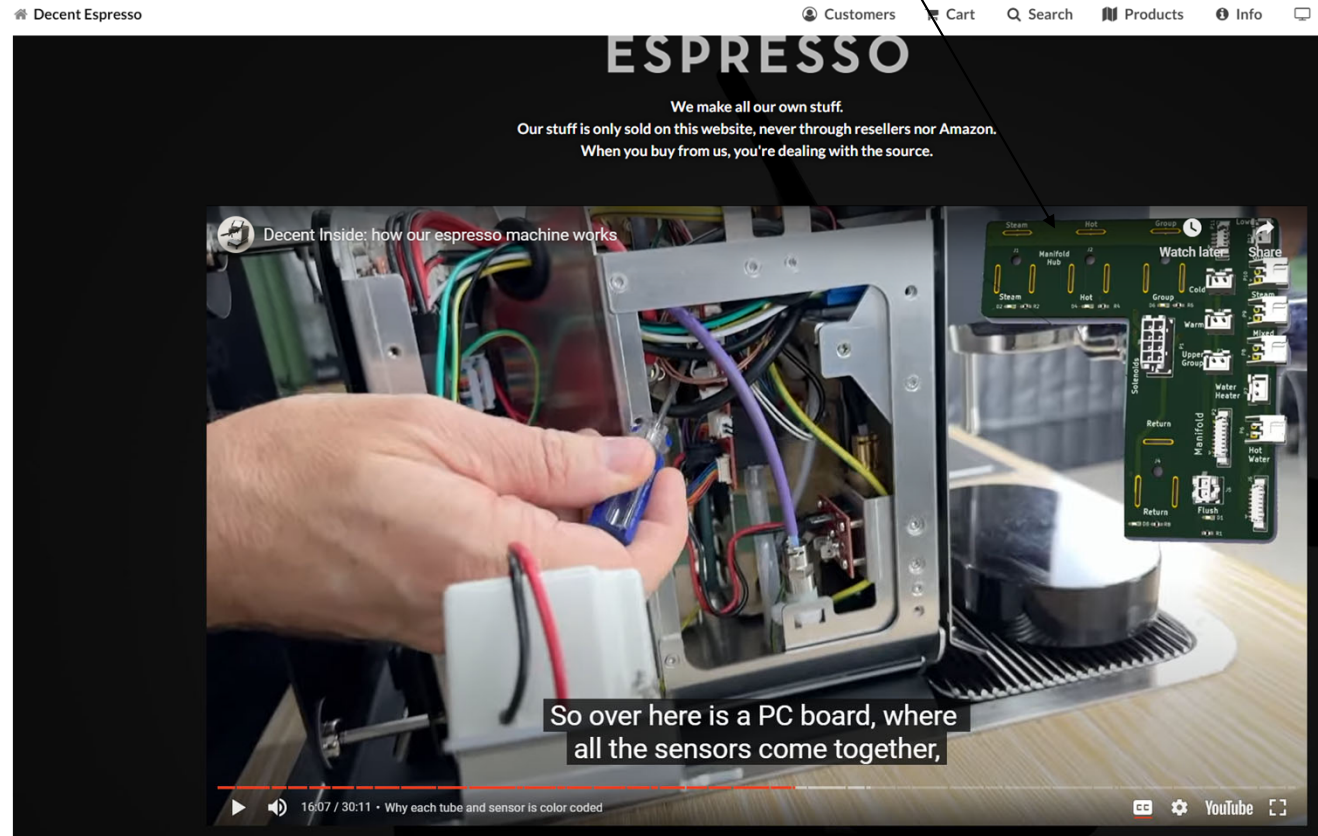
12. The infused beverage brewing assembly according to claim 11, wherein

the electronic controller is operably configured to send a control signal to the solvent flow management system to thermally modulate the solvent disposed within the first solvent conduit to a raised temperature higher and different than a temperature of the solvent disposed within the second solvent conduit [see also slide #s 1 and 6].

13. The infused beverage brewing assembly according to claim 12, wherein

the electronic controller is operably configured to send a control signal to the solvent temperature management system to dynamically and thermally modulate the solvent disposed within the first solvent conduit with respect to a brew parameter that includes at least one of an overall time and dispensed volume of the infused beverage [see slide #s 6 and 10].

Electronic controller showing connection and ability to send and/or receive signals with all sensors, SFMS, and STMS



<https://www.youtube.com/watch?v=9v6De11M0k4>

Claim Chart for the 456 Patent (Slide 14)

14. The infused beverage brewing assembly according to claim 12, further comprising:

a resulting solvent valve disposed upstream of the brewing chamber, downstream of the conduit joint, and in fluid communication with the resulting solvent conduit, the valve operably configured to selectively have a closed state inhibiting flow of the resulting solvent to the brewing chamber and an active state that includes a first selective directional flow path directing the flow of the resulting solvent to a removal conduit without passing the resulting solvent through the brewing chamber and a second selective directional flow path directing the flow of the resulting solvent to the brewing chamber, thereby enabling resulting solvent delivered to the brewing chamber at a desired temperature [see slide #s 2-3].

15. The infused beverage brewing assembly according to claim 14, wherein:

the temperature measuring device is coupled to and in fluid communication with the resulting solvent conduit and operably configured to measure the resulting solvent temperature and communicate the resulting solvent temperature to the electronic controller [see slide #5].

Claim Chart for the 456 Patent (Slide 15)

16. The infused beverage brewing assembly according to claim 15, wherein:

the electronic controller communicatively is coupled to the solvent temperature modulation system, the valve, the temperature measuring device, the electronic controller operably configured to at least one of dynamically modulate the solvent temperature modulation system and selectively maintain the valve in the first selective directional flow path of the active state until the desired temperature of the resulting solvent is ascertained by the temperature measuring device, the electronic controller selectively switching from the first selective directional flow path of the active state to the second selective directional flow path of the active state [see slide #s 1 and 6].