14. Apparatus, comprising;
(a) a plurality of material storage tanks each adapted to contain a supply of a respective material,
(b) a first selector valve means having a first port and a plurality of second ports and means for selectively connecting said first port of said first selector valve means to any one of said second ports of said first selector valve means,
(c) conduit means connecting said storage tanks to respective ports of said first selector valve means,
(d) a plurality of processing tanks, wherein at least one of said processing tanks is provided with an airtight removable cover having a vent for releasing gas from said tank,
(e) a second selector valve means having a first port and a plurality of second ports, and means for selectively connecting said first port of said second selector valve means to any one of said second ports of said second selector valve means,
(f) conduit means connecting said processing tanks to respective second ports of said second selector valve means,
(g) a material conveyance means connected between said first port of said first selector valve means and said first port of said second selector valve means, and
(h) control means connected to said first and said second selector valve means and to said material conveyance means for selectively connecting said storage tanks and said processing tanks and for causing said material conveyance means to convey material between said selected storage tank and a selected processing tank.

15. The apparatus of claim 14, wherein said material conveyance means is a pump.

16. The apparatus of claim 14, wherein said pump is a flexible impeller pump.

17. The apparatus of claim 14 wherein said pump is a rotary vane roller pump.

18. The apparatus of claim 14, further including means for illuminating the interior of said at least one processing tank provided with an airtight removable cover.

19. The apparatus of claim 14, further including a check valve comprising a hinged cover over said vent which, when closed, prevents air from entering said at least one processing tank provided with an airtight cover but, when lifted by an increase in pressure within said at least one processing tank provided with an airtight cover, provides a passage for releasing gas from said at least one processing tank provided with an airtight cover.

20. The apparatus of claim 14, further including a light baffle adjacent said vent disposed to prevent entry of light through said vent to said at least one processing tank provided with an airtight removable cover.

21. The apparatus of claim 14, wherein at least one of said plurality of processing tanks has one point in the bottom of said tank lower than any other part of the tank, and said at least one tank is provided with a material conduit extending generally vertically outside the tank and communicating at its lower end with the interior of said tank at said point.

22. The apparatus of claim 14, wherein at least one said processing tanks provided with an airtight removable cover is provided with an opening near its top, further including a source of gas under pressure and means for conducting gas from said source to said tank having an opening through said opening.

23. The apparatus of claim 22, wherein said gas is air and said source of gas under pressure is a blower.

24. The apparatus of claim 22, wherein said source is connected to a container of desiccant.

25. The apparatus of claim 22, further including means for heating the gas supplied by said source.

26. The apparatus of claim 23, wherein said blower is connected in series to a container of desiccant and to heater means to provide air which has been dried and heated.

27. The apparatus of claim 24, wherein said desiccant is particulate silica gel.

28. The apparatus of claim 24, wherein said desiccant is a zeolite.

29. The apparatus of claim 14, further including a temperature control bath containing at least one of said fluid storage tanks and at least one of said material processing tanks.

30. The apparatus of claim 1 or 14, further including a temperature control bath for one or more of the material storage tanks and/or material processing tanks, comprising
(a) a temperature bath tank containing a working fluid,
(b) means for continually circulating said working fluid,
(c) means for sensing the temperature of said working fluid,
(d) means responsive to said sensing means for heating said working fluid when its temperature is below a preset point and cooling said fluid when its temperature is above a preset point.

31. The apparatus of claim 30, wherein said sensing means is a thermistor.

32. The apparatus of claim 30, wherein said temperature bath tank containing a working fluid is provided with heat insulating means.

33. The apparatus of claim 30, wherein said means for heating and cooling said working fluid is a Peltier effect thermoelectric device.

34. The apparatus of claim 30, further including programmable digital means for controlling said preset point of said temperature sensing means.

35. The apparatus of claim 14, wherein at least one of said material processing tanks is provided with ultrasonic generator means for agitating the fluid contained in said at least one material processing tank.

36. The apparatus of claim 35, further including a complex waveform generator for driving said ultrasonic generator.

37. The apparatus of claim 35, further including programmable digital means for energizing said complex waveform generator.

38. The apparatus of claim 14, further including programmable digital means for controlling the operation of said selector valve means and said material conveyance means.

39. The apparatus of claim 38, wherein said digital means is microprocessor chip.

40. The apparatus of claim 14, wherein at least one of said material storage tanks is constructed with one point in the bottom lower than any other point in the material storage tank, and said material storage tank is provided with a material conduit extending generally vertically outside the material storage tank and communicating at its lower end with the interior of said material storage tank at said point.

41. The apparatus of claim 14, wherein at least one of said material storage tanks is provided with an airtight, light-tight cover.

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