

What is claimed is:

1. A method of filtering a liquid raw material in a process stream to yield product, comprising:

providing a filtration system comprising:

a network defining a fluid process stream, said network having one or more inputs for introducing fluid into said process stream, and one or more outlets for discharging fluid from said process stream;

a first process filter within said fluid process stream;

a second process filter within said process stream, said second process filter being positioned in series with said first process filter and downstream thereof;

wherein at least one of said first process filter and said second process filter is a barrier filter comprising, within a common enclosure, at least one hydrophilic filter membrane and at least one hydrophobic filter membrane; and

filtering said liquid raw material with said first and second process filters to yield said product.

2. The method of claim 1, further comprising recovering the product of said filtration step.

3. The method of claim 1, wherein said barrier filter comprises a plurality of hydrophilic membranes and a plurality of hydrophobic membranes, and wherein said hydrophilic membranes are interspersed between said hydrophobic membranes.

4. The method of claim 1, wherein said first process filter is said barrier filter.

5. The method of claim 1, wherein said second process filter is said barrier filter.

6. The method of claim 1, wherein both said first and said second process filters are barrier filters.

7. The method of claim 1, wherein said fluid process stream is devoid of an air filter between said first and second process filters.

8. The method of claim 1, wherein said fluid process stream is devoid of a drain filter between said first and second process filters.

9. A method for filtering fluid to yield a desired product, said method comprising:

providing a filtration train;

providing a process stream having an inlet and an outlet for discharging a desired product from said process stream resulting from said filtration train, said filtration train being in fluid communication with said inlet and said outlet, said filtration train comprising a first process filter and a second process filter positioned in series with said first process filter and downstream thereof, wherein at least one of said first process filter and said second process filter is a barrier filter comprising, within a common enclosure, at least one hydrophilic filter membrane and at least one hydrophobic filter membrane,

introducing said fluid into said process stream, and

filtering said fluid with said filtration train in said process stream through said first and second process filters to yield said desired product.

10. The method of claim 9, wherein said barrier filter comprises a plurality of hydrophilic membranes and a plurality of hydrophobic membranes, and wherein said hydrophilic membranes are interspersed between said hydrophobic membranes.

11. The method of claim 9, wherein said first process filter is said barrier filter.

12. The method of claim 9, wherein said second process filter is said barrier filter.

13. The method of claim 9, wherein both said first and said second process filters are barrier filters.

14. The method of claim 9, wherein said fluid process stream is devoid of an air filter between said first and second process filters.

15. The method of claim 9, wherein said fluid process stream is devoid of a drain filter between said first and second process filters.