Claims

1. A bottom section configured to be connected to an assembly for separating a solid component from a fluid, said assembly including an inclined plate settler with at least one sedimentation channel for letting a solid component to be separated settle, said plate settler comprising a lower portion and an upper portion, wherein said at least one sedimentation channel extends from the lower portion to the upper portion, wherein the bottom section is configured to be connected to the lower portion of the inclined plate settler, the bottom section comprising:

at least one inlet channel configured to feed a fluid comprising the solid component to be separated to the plate settler,

at least one collection channel configured to collect a settled component descending from the at least one sedimentation channel, and

at least one wash fluid supply channel configured to supply a wash fluid to one sedimentation channel or to one collection channel, said at least one wash fluid supply channel being fluidly separated from other wash fluid supply channels and from all inlet channels,

wherein said at least one inlet channel and said at least one collection channel are fluidly separated from each other, said inlet channel and said collection channel configured to be connected to said at least one sedimentation channel to form fluid connections between said at least one inlet channel and said at least one sedimentation channel and between said at least one collection channel and said at least one sedimentation channel, respectively.

2. The bottom section of claim 1, for being connected to an assembly with a plate settler comprising a plurality of sedimentation channels and separation plates separating neighboring sedimentation channels, the bottom section comprising a plurality of inlet channels and a plurality

of collection channels, wherein said at least one inlet channel and said at least one collection channel are fluidly separated from all remaining inlet and collection channels, respectively, and

wherein the flow connection between said at least one inlet channel and the corresponding sedimentation channel and said at least one collection channel and the corresponding sedimentation channel are separate from fluid connections between all other sedimentation channels and all other inlet channels and collection channels, respectively.

3. The bottom section of claim 2, comprising one individual inlet channel and one individual collection channel for at least 50%, optionally at least 75% or at least 95%, of the sedimentation channels of a corresponding assembly, to which the bottom section is configured to be connectable, optionally one individual collection channel and one individual inlet channel for each of the plurality of sedimentation channels, wherein a separate fluid connection is formable for each corresponding pair of inlet channel and sedimentation channel and for each corresponding pair of collection channel and sedimentation channel, respectively.

4. The bottom section of any one of the previous claims, wherein the bottom section is configured to be connected to an assembly oriented in a use position, such that end portions of the inlet channels and end portions of the collection channels proximate to the plate settler extend in the direction of gravity.

5. The bottom section of claim 1, wherein the at least one wash fluid supply channel and the at least one collection channel corresponding to the same sedimentation channel are fluidly connected by an opening in a wall portion shared by said wash fluid supply channel and said collection channel.

6. The bottom section of any one of the previous claims, comprising:

at least one intrachannel distributing portion for evenly distributing a fluid flow through a part of a first channel proximate to a corresponding sedimentation channel over at least one direction of extension across the cross-section of said particular channel,

wherein said first channel is an inlet channel or a collection channel or a wash fluid supply channel; and/or

at least one interchannel distributing portion for evenly distributing a fluid flow in the direction to or the direction from a plate settler over a plurality of inlet channels and/or wash fluid supply channels and/or collection channels.

7. The bottom section of claim 6, wherein the intrachannel distributing portion connects an upper part of the first channel, said upper part to be located proximate to the corresponding sedimentation channel, with a lower part of said first channel,

wherein the lower part of the first channel is split into two connecting channels of equal first cross-sections, and said connecting channels are preferably at least once further split into respective connecting sub-channels of respective other equal cross-sections, wherein the first cross-sections are identical to or different from the respective other cross-sections, and wherein end portions of all of the connecting sub-channels after the respective last splits are connected to the upper part so as to be evenly distributed over a distributing direction.

8. The bottom section of claim 6 or 7, wherein the interchannel distributing portion comprises an upper portion to be connected to one or several inlet channels or one or several wash fluid channels or one or several collection channels, and a lower portion,

wherein the lower part is split into two connection channels of equal first cross-section, and said connection channels are optionally at least once further split into respective connection sub-channels of respective other equal cross-sections, wherein the first cross-sections are identical to or different from the respective other cross-sections, and wherein end portions of all of the connection sub-channels after the respective last splits are connected to the upper portion so as to be evenly distributed over a distributing direction.

9. The bottom section of any one of claims 6 to 8, wherein the intrachannel distributing portion and the interchannel distributing portion are connected, the intrachannel distributing portion being configured to be arranged more proximately to the plate settler than the interchannel distributing portion.

10. The bottom section of any one of claims 6 to 9, wherein all of the inlet channels and the collection channels are provided in pairs, optionally as triplets together with one wash fluid supply channel each, and wherein all of the inlet channels are fueled by one corresponding interchannel distributing portion each, all of the collection channels are joined by one corresponding interchannel distributing portion, and optionally all wash fluid supply channels are fueled by one corresponding interchannel distributing portion each; and/or

wherein all of the inlet channels are associated with one intrachannel distributing portion, all of the collection channels are associated with one intrachannel distributing portion, and optionally all of the wash fluid supply channels are associated with one intrachannel distributing portion.

11. The bottom section of any one of claims 6 to 10, comprising intrachannel distributing portions and interchannel distributing portions, wherein the

distributing direction of the intrachannel distributing portions is optionally a longitudinal extension direction of a cross-section of a connecting end part of the first channel to be located proximate to the plate settler, and the distributing direction of the interchannel distributing portions is perpendicular to the distributing direction of the intrachannel distributing portions.

12. The bottom section of any one of claims 6 to 11, wherein the intrachannel distributing portion is a fractal flow distributor and/or the interchannel distributing portion is a fractal flow distributor.

13. The bottom section according to any one of the previous claims, wherein bottom surfaces of neighboring sedimentation channels extend parallel to one another and include at least a part that is not inclined in any direction other than the direction of inclination of the sedimentation channels, and/or

wherein the angle of inclination of the sedimentation channels with respect to the direction of gravity lies in a range of 15° to 85°.

14. An assembly for separating a solid component from a fluid, the assembly comprising an inclined plate settler with a lower portion, an upper portion, and at least one sedimentation channel for letting a solid component to be separated settle, said sedimentation channel extend from the lower portion to the upper portion,

the plate settler being configured to be oriented during use such that the at least one sedimentation channel extends from the lower portion to the upper portion in a direction that is inclined with respect to the direction of gravity,

wherein the at least one sedimentation channel is connected to a fluid outlet for draining a rest fluid at the upper portion and connected to ~~a~~ the bottom section

according to any one of the previous claims at the lower portion.

15. The assembly according to claim 14, comprising a plurality of sedimentation channels for letting a solid component to be separated settle, said sedimentation channels extending from the lower portion to the upper portion, and the plate settler further comprising separation plates separating neighboring channels,

the plate settler being configured to be oriented during use such that the separation plates do not overlap in the direction of gravity,

wherein the plurality of sedimentation channels is connected to at least one fluid outlet for draining a rest fluid at the upper portion and connected to ~~a~~ the bottom section according to any one of ~~the previous~~ claims 1 to 13 at the lower portion.

16. Use of ~~a~~ the bottom section according to any one of ~~the previous~~ claims 1 to 13 with ~~an~~ the assembly according to claim ~~13~~ 14 or ~~14~~15, such that a relative difference between hydrostatic pressures in different sedimentation channels does not exceed a threshold of 10%, optionally of 3%.

17. Use of ~~a~~ the bottom section according to claim 1 or 5 in ~~an~~ the assembly according to claim ~~13~~ 14 or ~~14~~ 15 comprising supplying a fluid comprising a solid component to be separated to the plate settler through the at least one inlet channel, and a wash buffer fluid through the at least one wash fluid supply channel,

wherein a density of the wash buffer fluid is equal to or higher than a density of the fluid comprising the solid component to be separated.

18. A method for separating solid components from a fluid, wherein the method comprises the following steps (i) to (iv):

(i) feeding fluid comprising the solid components to the at least one inlet channel of the bottom section of any one of claims 1 to 13;

(ii) letting the solid components settle;

(iii) draining the rest fluid;

(iv) collecting the settled components through the at least one collection channel of said bottom section.

19. The method for separating solid components from a fluid according to claim 18, wherein the solid components to be separated are precipitates.

20. The method for separating solid components from a fluid according to claim 18, wherein the solid components to be separated are cells.

21. The method for separating solid components from a fluid according to claim 20, wherein the cells are capable of producing a biologically active substance and wherein the fluid contains said biologically active substance.

22. The method for separating solid components from a fluid according to claim 21, wherein the biologically active substance is a coagulation factor, preferably wherein the biologically active substance is Factor VIII.

23. The method for separating solid components from a fluid according to any one of claims 18 to 22, wherein the bottom section is comprised in the assembly of claim 14 or 15, and wherein the step of letting the solid components settle is a step of letting the solid components settle in the at least one sedimentation channel of the inclined plate settler.

24. The method for separating solid components from a fluid according to claim 23, wherein in step (iii) the rest fluid is drained at the upper portion of the at least one sedimentation channel.

25. The method for separating solid components from a fluid according to claim 24, wherein the amount of solid components in the drained rest fluid is less than 20%, preferably less than 10%, most preferably less than 5% of the amount of solid components in the fluid that is fed to the at least one inlet channel of the bottom section.

26. The method for separating solid components from a fluid according to claim 24 or 25, wherein the solid components to be separated are cells, wherein the cells are capable of producing a biologically active substance, wherein the fluid contains said biologically active substance, and wherein the amount of biologically active substance in the drained rest fluid is more than 80%, preferably more than 90%, most preferably more than 95% of the amount of biologically active substance in the fluid that is fed to the at least one inlet channel of the bottom section.

27. The method for separating solid components from a fluid according to any one of claims 18 or 26, wherein the fluid comprising the solid components is continuously fed to the at least one inlet channel of the bottom section.

28. The method for separating solid components from a fluid according to any one of claims 18 or 27, wherein the method is performed at a temperature of between 0°C and 10°C, preferably at a temperature of between 2°C and 8°C.