CLAIMS

What is claimed:

1. A process for treating biological liquid by viral inactivation, using a treatment installation (1), it comprises

a main supply valve (4) for supplying biological liquid to treat, configured to be connected to at least one source (5) of biological liquid supply;

a first treatment line (2) downstream of said supply valve and provided with a first main treatment tank (7) configured to be supplied by said supply valve with biological liquid to treat;

a second treatment line (3) downstream of said supply valve and provided with a second main treatment tank (14) configured to be supplied by said supply valve with biological liquid to treat; said second treatment line being in parallel with said first treatment line; and

a third main treatment tank (11) disposed at an outlet both from said first treatment line and from said second treatment line and which is configured to be successively supplied by said first main treatment tank and by said second main treatment tank;

said installation is configured such that in each of said first, second and third main treatment tanks, a determined volume of acid and a determined volume of base are introduced at least so as to adjust a pH of said biological liquid; and said installation is also configured to regulate a rate of drainage flow of said third main treatment tank so as to provide a continuous rate of flow of treated biological liquid at an outlet from said installation,

said first treatment line (2) is provided with a first intermediate treatment tank (9) disposed between said first and third main treatment tanks (7, 11).

said second treatment line (3) is provided with a second intermediate treatment tank (16) disposed between said second and third main treatment tanks (14, 11),

said process comprising:

a step A of at least partial filling with biological liquid to treat of the first main treatment tank (7) of a first treatment line (2) of said installation via a main supply valve (4) of said installation;

a step B of adjusting pH of said biological liquid by introducing a determined volume of acid and a determined volume of base into said first main treatment tank (7);

a step C of transferring said biological liquid from said first main treatment tank (7) to said first intermediate treatment tank (9);

a step D of incubating said biological liquid in said first treatment line (2) for a predetermined time and a step E of adjusting pH of said biological liquid by introducing a determined volume of acid and a determined volume of base into said first treatment line (2) to approach a target pH;

a step F of transferring said treated biological liquid into a third main treatment tank (11) of said installation disposed at an outlet from said first treatment line (2), and a step G of pre-polishing by introducing a determined volume of acid and a determined volume of base into said third main treatment tank (11) to obtain a treated biological liquid at the target pH;

a step A' of at least partial filling with biological liquid to treat of a second main treatment tank (14) of a second treatment line (3) of said installation via said main supply valve (4), said second treatment line (3) being in parallel with said first treatment line (2);

a step B' of adjusting pH of said biological liquid by introducing a determined volume of acid and a determined volume of base into said second main treatment tank (14);

a step C' of transferring said biological liquid from said second main treatment tank (14) to said second intermediate treatment tank (16);

a step D' of incubating said biological liquid in said second treatment line (3) for a predetermined time and a step E' of adjusting pH of said biological liquid by introducing a determined volume of acid and a determined volume of base into said second treatment line (3) to approach a target pH;

a step F' of transferring said treated biological liquid into said third main treatment tank (11) also disposed at an outlet from said second

treatment line (3), and a step G' of pre-polishing by introducing a determined volume of acid and a determined volume of base into said third main treatment tank (11) to obtain a treated biological liquid at the target pH;

at the same time as the steps of pre-polishing and/or of transferring and/or incubating and/or adjusting pH implemented in said second treatment line (3), a step of draining said third main treatment tank (11) by regulating a draining rate of flow so as to provide a continuous rate of flow of treated biological liquid at an outlet from said installation (1),

wherein the duration of the step A is the same as the duration of the steps B' to F', and the duration of the step A' is the same as the duration of the steps B to F.

2. A process according to claim 1, characterized in that said first treatment line (2) is provided with the first intermediate treatment tank (9) disposed between said first and third main treatment tanks (7, 11) and said second treatment line (3) is provided with the second intermediate treatment tank (16) disposed between said second and third main treatment tanks (14, 11); and the process comprises a step of transferring said biological liquid from said first main treatment tank (7) to said first intermediate treatment tank (9) and the steps of incubating and adjusting pH to approach a target pH in said first treatment line (2) take place in said first intermediate treatment tank (9); as well as a step of transferring said biological liquid from said second main treatment tank (14) to said second intermediate treatment tank (16) and the steps of incubating and adjusting pH to approach a target pH in said second treatment line (3) take place in said second intermediate treatment tank (16).