CLAIMS

1. A device (1) for a biological liquid treatment installation, ~~characterized in that it comprises~~having a circuit (8) comprising a plurality of connectors (11) and a network (12) for conveying liquid between said connectors (11), which aid circuit (8) comprises a bag (10) comprising two flexible films (65, 66) and said connectors (11), which said circuit (8) further comprises a press (9), characterized in that the device (1) further comprises:

- a base (2) having a front face (5); and

~~- a circuit (8) comprising a plurality of connectors (11) and a network (12) for conveying liquid between said connectors (11), which circuit (8) comprises a bag (10) comprising two flexible films (65, 66) and said conveying network (11) connectors (12), which circuit (8) further comprises a press (9) comprising a first shell (16) disposed upright on said front face (5) of said base (2) and a second shell (17) mounted on said first shell (16), said first shell (16) and second shell (17) cooperating with said bag (10) to form, between said flexible films (65, 66), by clamping of said bag (10) between said first shell (16) and said second shell (17), conduits (13) of said conveying network (12);~~

- said press (9) comprises a first shell (16) disposed upright on said front face (5) of said base (2) in a vertical position and a second shell (17) mounted on said first shell (16), said first shell (16) and second shell (17) cooperating with said bag (I0) to form, between said flexible films (65, 66), by entirely clamping of said bag (10) between said first shell (16) and said second shell (17), conduits (13) of said conveying network (12);

the two said flexible films (65, 66) of said bag (10) being joined to each other and delimiting a zone (67) for treatment of said liquid according to a closed outline, said ~~conveying network (11)~~ connectors (11) ~~emerging on~~extending from the inside and ~~on~~ from the outside of at least one side (68, 69, 70) of said outline; ~~and~~

said bag (10) further comprising a first through apertures (73) on one side (71) of said bag (10) for its positioning, and said first shell (16) comprising studs (106) for hooking said bag (10) to an upper part of said first shell (16), said hooking studs (106) passing through said first through apertures (73) of said bag (10)~~.~~;

said device (1) comprises a second locking system configured such that it locks together said first shell (16) and said second shell (17): and

said bag (10) comprises at least one second through aperture (75) in a treatment zone (67) of said liquid, between conducts (13) of said conveying network (12), allowing clamping means of said second locking system to pass through for clamping said bag (10) in said circuit (8).

2. AThe device according to claim 1, characterized in that said base (2) of said device (1) comprises, on its front face (5), a console-forming inclined chassis (25) on which is disposed the first shell (16), which chassis (25) comprises hooking claws (26)(28), and said first shell (16) comprises dowels (100) engaged in said hooking claws (26).

3. AThe device according to any one of claims 1 to 2, characterized in that said second shell (17) has a first hole (88), and said second locking system comprises at least one ball-lock pin (110), which ball-lock pin (110) is provided with a body (111), a head (114) and balls (119) and having an unlocked state and a locked state, said ball-lock pin (110) being fastened to said first shell (16), said head (114) passing through said first shell (16) and said second through aperture (75) and emerging into said first hole (88) of said second shell (17), said balls (119) entering said head (114) in said unlocked state of said pin (110) and projecting from said head (114) in said locked state of said pin (110).it comprises a second locking system configured such that it locks together said first shell (16) and said second shell (17).

4. A device according to any one of claims 1 to 3, characterized in that said ~~second shell (17) has a first hole (88), said bag (10) comprises at least one second through aperture (75) in a treatment zone (67) of said liquid, and said second locking system comprises at least one ball-lock pin (110) provided with a body (111), a head (114) and balls (119) and having an unlocked state and a locked state, said ball-lock pin (110) being fastened to said first shell (16), said head (114) passing through said first shell (16) and said second through aperture (75) and emerging into said first hole (88) of said second shell (17), said balls (119) entering said head (114) in said unlocked state of said pin (110) and projecting from said head (114) in said locked state of said pin (110).~~bag (10) comprises at least one third through aperture (77), said first shell (16) comprises at least one dowel (107) which passes through said third through aperture (77) and said second shell (17) comprises at least one second hole (87) which receives said dowel (107) of said shell (16).

5. ~~A~~The device according to any one of claims 1 to 4, characterized in that said ~~bag (10) comprises at least one third through aperture (77) on one side (70, 71) of said bag (10), said first shell (16) comprises at least one dowel (107) which passes through said third through aperture (77) and said second shell (17) comprises at least one second hole (87) which receives said dowel (107) of said first shell (16).~~circuit (8) comprises instruments (125, 126) necessary for the treatment of said biological liquid, and said instruments (125, 126) are integrated into said first shell (16).

6. ~~A~~The device according to ~~any one of claims 1 to~~claim 5, characterized~~Characterized~~ in that said ~~circuit (8) comprises instruments (125, 126) necessary for the treatment of said biological liquid, in particular valves (125) to allow or prevent the passage of said liquid in said conduits, and/or sensors (126) of physic-chemical values of said liquid, and~~first shell (16) comprises a first connector (130) at the back, and said base (2) of said device (1) comprises a second connector (135) configured such that It connects to said first connector (130) to power said instruments (125, 126) ~~are~~ integrated into said first shell (16).

7. ~~A~~The device according to claim 6, characterized in that said ~~first shell (16) comprises a first connector (130) at the back, and said base (2) of said device (1) comprises a second connector (135) configured such that it connects to said first connector (130) to power said instruments (125, 126) integrated into said first shell (16).~~front face (5) of said base (2) comprises a frame (35) provided with an opening

(138), and said second connector (135) is configured such that it passes through said opening (138) to connect to said first connector (130).

8. AThe device according to any one of claims 1 toclaim 7, characterized inIn that it comprises a movable or removable door (20), said device having a closed door position, in which second shell (17) is disposed in said door (20) to form said circuit (8), and which furthermore has a position other than said closed door position in which said bag (10) Is carried only by the first shell (18).said front face (5) of said base (2) comprises a frame (35) provided with an opening (138), and said second connector (135) is configured such that it passes through said opening (138) to connect to said first connector (130).

9. AThe device according to ~~any one of claims 1 to~~claim 8, characterized in that it comprises a ~~movable or removable door (20), said device having a closed door position, in which second shell (17) is disposed in said door (20) to form said circuit (8), and which furthermore has a position other than said closed door position in which said bag (10) is carried only by the first shell (16).~~hinge system hinging said door (20) relative to said base (2), said hinge system being disposed only on one side of said door (20) so as to form, in the closed door position, lateral clearances between said door (20) and said base (2) over the rest of a perimeter of said door (20), so as to enable free access to the connectors (11) of said bag (10).

10. AThe device according to claim 9, characterized in that ~~it~~said hinge system comprises a ~~hinge system hinging said door (20) relative to said base (2), said hinge system being disposed only on one side of said door (20) so as to form, in the closed door position, lateral clearances between said door (20) and said base (2) over the rest of a perimeter of said door (20), so as to enable free access to the connectors (11) of said bag (20).~~single hinge (42) disposed at a corner of said door (20), and said hinge (42) comprises a first hinge portion (43) fastened to said corner of said door (20) and a second hinge portion (44) fastened to a lateral face (3) of said device (2), which lateral face (3) is connected to said front face (5).

11. AThe device according to claim 10, characterized in that said axis of said hinge ~~system comprises a single hinge (42) disposed at a corner of said door (20), and said hinge (42) comprises a first hinge portion (43) fastened to said corner of said door (20) and a second hinge portion (44) fastened to a lateral face (3) of said device(2),which lateral face (3) is connected to said front face (5).~~(42) is offset from s joining plane (P) formed between said first shell (16) end second shell (17) in the closed door position.

12. AThe device according to claim ~~11~~8, characterized in that ~~said axis (42) of said hinge is offset from a joining plane (P) formed between said first shell (16) and second shell (17) in the closed door position.~~it comprises a first locking system (55) for fastening said second shell (17) into a frame (35) of said door (20), which first locking system (55) comprises:

- at least one jack (56) disposed in said frame (35);

- at least one spring (59) disposed in said frame (35);

- at least one rod (57) linked to said at least one jack (56) by a first end and to at least one spring (59) by a second end that is an opposite end to the first end, said

at least one rod (57) comprising at least one locking bolt (58) and having an unlocked position and a locked position; and

- at least one lock strike (89) arranged in a recess of said second shell (17);

said at least one jack (56) being configured to actuate the said at least one rod (57) between its locked position and its unlocked position;

- said at least one spring (59) being configured to actuate the passage of said at least one rod (57) between its unlocked position and its locked position; and

said at least one locking bolt (58) being engaged in said at least one lock strike (89) in the locked position of said rod (57) and being disengaged from said at least one lock strike (89) in the unlocked position of said rod (57).

~~13. A device according to any one of claims 9 to 12, characterized in that it comprises a first locking system (55) for fastening said second shell (17) into a frame (35) of said door (20), which first locking system (55) comprises:~~

~~- at least one jack (56) disposed in said frame (35);~~

~~- at least one spring (59) disposed in said frame (35);~~

~~- at least one rod (57) linked to said at least one jack (56) by a first end and to at least one spring (59) by a second end that is an opposite end to the first end, said at least one rod (57) comprising at least one locking bolt (58) and having an unlocked position and a locked position; and~~

~~- at least one lock strike (89) arranged in a recess of said second shell (17);~~

~~said at least one jack (56) being configured to actuate the passage of said at least one rod (57) between its locked position and its unlocked position;~~

~~said at least one spring (59) being configured to actuate the passage of said at least one rod (57) between its unlocked position and its locked position; and~~

~~said at least one locking bolt (58) being engaged in said at least one lock strike (89) in the locked position of said rod (57) and being disengaged from said at least on lock strike (89) in the unlocked position of said rod (57).~~

13. A bag (10) for a circuit (8) of a biological liquid treatment installation, .characterized in that it comprises:

- two flexible films (65, 66) joined to each other and delimiting a zone (67) for treatment of said liquid according to a closed outline, connectors (11) of a conveying network (12) of said circuit (8) emerging on the inside and on the outside of at least one side (68, 69, 70) of said outline;

- at least one first through aperture (73) on one side (71) of said outline, which first through aperture (73) enables said bag (10) to be positioned in said circuit (8) ; and

- at least one second through aperture (75) in the treatment zone (67) of said liquid, between conduits (13) of the conveying network (12), enabling the passage of means for clamping (110) said bag (10) in said circuit (8).

~~14. A bag for a circuit of a biological liquid treatment installation, characterized in that it comprises:~~

~~- two flexible films (65, 66) joined to each other and delimiting a zone (67) for treatment of said liquid according to a closed outline, connectors (11) of a conveying network (12) of said circuit (8) emerging on the inside and on the outside of at least one side (68, 69 ,70) of said outline;~~

~~- at least one first through aperture (73) on one side (71) of said outline, which first through aperture (73) enables said bag (10) to be positioned in said circuit (8) ; and~~

~~- at least one second through aperture (75) in the treatment zone (67) of said liquid, between conduits (13) of the conveying network (12), enabling the passage of means for clamping (110) said bag (10) in said circuit (8).~~

~~15~~14. AThe bag according to claim ~~14~~13, characterized in that it further comprises at least a third through aperture (77) on one side (70, 71) of said outline.