CLAIMS

1. An apparatus (100, 700, 8001, 802, 803) for growing biomass, wherein the apparatus comprises:

at least one plate (110, 210, 310, 410, 710) comprising at least two plate sections (120, 220, 320, 331, 332, 333, 420, 421, 422) configured to be movable between an opened position and a closed position,

wherein in the closed position the at least two plate sections jointly form a first surface for receiving and holding a growth medium for growing biomass and wherein in the opened position the at least two plate sections are pivoted away from the closed position such that the growth medium is slidably released from the at least one plate;

wherein the at least one plate is movably supported on at least one first railing (150, 750), wherein the apparatus further comprises a first drive mechanism (715) for independently moving each of the at least one plate along the at least one first railing; and

wherein the at least two plate sections are pivotable about a first axis (251) and a second axis (252) respectively.

2. The apparatus according to claim 1, wherein the at least one plate further comprises borders (225) arranged along at least a portion of a perimeter of the first surface.

3. The apparatus according to claim 1, wherein the first axis and the second axis are co-linear.

4. The apparatus according to any of the preceding claims, wherein one or more of said at least one plate further comprises a respective thermoregulating device (226) arranged along at least a portion of the perimeter of the first surface, wherein the thermoregulating device is one of a refrigerant conduit, a cooling coil, a water pipe, and a heating coil.

5. The apparatus according to any one of claims 1 to 4, wherein the first drive mechanism comprises at least one chain (760) adapted to engage at least one edge of the at least one plate, and wherein the first drive mechanism further

comprises motor driven sprockets (770) for moving the at least one chain back and forth along the at least one first railing.

6. The apparatus according to any one of claims 1 to 5, wherein the at least one plate is attached to the at least one first railing via at least one third railing (160) oriented perpendicular to the at least one first railing such that the at least one plate and the at least one third railing are movable together along the at least one first railing, wherein the at least one plate is movably supported on the at least one third railing for movement along the at least one third railing, and wherein the apparatus further comprises a third drive mechanism for moving the at least one plate along the at least one third railing.

7. The apparatus according to any one of claims 1 to 6, comprising a plurality of plates movably supported on respective first railings and movable by the first drive mechanism wherein each of the first railings are configured to be positioned one above the other and above the at least one second railing.

8. A device for separating a growth medium, wherein the device comprises:

at least one grid (130, 230, 430, 531, 532, 533, 534, 630, 730) comprising at least two grid sections (140, 240, 440, 441, 442, 540) movable between an opened position and a closed position,

wherein in the closed position the at least two grid sections jointly form a second surface, wherein said at least two grid sections comprise a meshing (141, 241, 541, 542, 543, 544) having a plurality of mesh openings (245) for receiving and separating the growth medium,

wherein in the opened position the at least two grid sections are pivoted about a third (254, 561) and a fourth axis (255, 562) respectively and away from the closed position such that separated growth medium falls off the at least one grid, and

wherein the at least one grid is movably supported on at least one second railing (780); and

a second drive mechanism (716) for independently moving each of the at least one grid along the at least one second railing.

9. The device according to claim 8, wherein the device comprises a plurality of said at least one grid wherein the grids are positioned elevated from one another to form part of a multi-layered grid assembly (500, 600).

10. The device according to claim 8, wherein each of the grids of the multi-layered grid assembly are provided with differently sized mesh openings.

11. The device according to any one of claims 8-10, wherein the at least one second railing comprises a separate channel (781) for support of each grid, and wherein the second drive mechanism is configured to move each grid independently along the separate channel.

12. The device according to any one of claims 8-11, wherein the multi-layered grid assembly comprises at its bottom a container (635) comprising at least two container sections (620) pivotable between an opened position and a closed position, wherein in the closed position the at least two container sections jointly form a third surface (640) receiving and holding the separated growth medium, wherein in the opened position the at least two container sections are pivoted away from the closed position such that separated growth medium is slidably released from the container.

13. The device according to any one of claims 8 to 12, wherein the second drive mechanism comprises at least one chain (761) adapted to engage at least one edge of the at least one grid, wherein the second drive mechanism comprises motor driven sprockets (771) for moving the at least one chain back and forth along the at least one second railing.

14. The device according to any one of claims 8-13, wherein the at least one grid is attached to the at least one second railing via at least one fourth railing (170) oriented perpendicular to the at least one second railing such that the at least one grid and the at least one fourth railing are movable along the at least one second railing, wherein the at least one grid is movably supported on the at least one fourth railing for movement along the at least one fourth railing, and wherein the apparatus further comprises a fourth drive mechanism for moving the at least one grid along the at least one fourth railing

15. An arrangement comprising the apparatus according to any one of claims 1-7 and the device according to any one of claims 8-14, wherein the at least one first railing is positioned above the at least one second railing such that the at

least one plate and the at least one grid are movable to a discharging position (172, 872) in which the at least one plate and the at least one grid are superimposed.