

CLAIMS

1. A discharge device (30) for centrifuging a reaction vessel unit (21), which has a plurality of
5 reaction vessels (37);
 - 1.1 wherein the reaction vessels (37) each have an opening (38) that lies in a common opening plane (39);
 - 1.2 wherein the discharge device (30) has a discharge plate (31), which is embodied in such a way
10 1.2.1 that in a centrifuge (1) having a rotor (20) with an axis of rotation, it can be or is positioned opposite from the openings of the reaction vessels (37); and
1.2.2 that it rotates with the reaction vessel unit (21) during centrifugation and liquid exiting the reaction vessels (37) is collected and discharged by the discharge plate (31);
 - 1.3 wherein the discharge surface of the discharge plate (31) facing the openings of the reaction
15 vessels (37) is provided with at least one fin (40), which is positioned approximately parallel to the axis of rotation of the rotor (20) and transverse to the direction of movement of the discharge plate (31).
2. The discharge device (30) according to claim 1,
20 characterized in that
 - 2.1 the discharge surface of the discharge plate (31) facing the reaction vessel unit (21) is inclined relative to the axis of rotation of the rotor (20) in such a way that the distance of the discharge surface from the axis of rotation of the rotor (21) increases in the direction toward a discharge opening of the centrifuge (1) or of the discharge device (30); and/or
25 2.2 the at least one fin (40) is arranged with its length oriented at an angle to the axis of rotation of the rotor (20) in such a way that liquid exiting the reaction vessels (37) upon acceleration of the rotor (20) is guided by the fin (40) in the direction toward the discharge opening.
3. The discharge device (30) according to claim 2,
30 characterized in that
the inclination of the fin (40) relative to the axis of rotation of the rotor (20) is greater in a region adjacent to the discharge opening than in a region farther away from the discharge opening.

4. The discharge device (30) according to claim 3,
characterized in that
the fin (40) is curved or has one or more bends along its length.
5. The discharge device (30) according to one of claims 1 to 4,
characterized in that
5.1 several fins (40) are provided;
5.2 wherein the fins (40) are in particular positioned approximately parallel to each other.
6. The discharge device (30) according to one of claims 1 to 5,
characterized in that
the discharge plate (31) is curved in such a way that it forms a segment of a body that is approximately rotationally symmetrical to the axis of rotation.
7. The discharge device (30) according to one of claims 1 to 6,
characterized in that
the discharge plate (31) can be attached to the rotor (20) of the centrifuge (1) or to the reaction vessel unit (21) by means of a detachable coupling mechanism (42).
8. The discharge device (30) according to claim 7,
characterized in that
the coupling mechanism (42) is embodied as a quick-release fastener, in particular as a linearly couplable quick-release fastener.
9. A centrifuge (1) with a rotor (20) which is mounted so that it is able to rotate around an axis of rotation; and
8.1 with a discharge device (30) according to one of claims 1 to 7, with which it is possible to guide a liquid to a discharge opening of the centrifuge (1) or discharge device (30);
8.1.1 wherein the discharge device (30) is detachably connected to the rotor (20) or to a reaction vessel unit (21) inserted in the rotor (20) in such a way that it rotates together with the rotor (20);
8.2 wherein a discharge chute (41) leads away from the discharge opening;
8.3 wherein a rinsing device for rinsing the discharge chute (41) with a cleaning liquid is provided.

10. A method for cleaning a discharge device (30) in a centrifuge (1),
wherein the discharge device (30) has a discharge plate (31), which is embodied in such a
way that it is positioned opposite from the openings (38) of the reaction vessels (37) of a re-
5 action vessel unit (21) in the centrifuge (1), and in such a way that it rotates with the reac-
tion vessel unit (21) during centrifugation and liquid exiting the reaction vessels (37) due to
the centrifugal acceleration is collected and discharged by the discharge plate (31),
with the following steps
9.1 introducing a reaction vessel unit (21) into the rotor (20) of the centrifuge (1), wherein at
10 least one reaction vessel (37) of the reaction vessel unit (21) is filled with a cleaning liquid,
9.2 rotating the rotor (20) so that the cleaning liquid flows out of the at least one reaction
vessel (37) and is collected by the discharge plate (31),
9.3 acting of the cleaning liquid on the discharge plate (31) for a predetermined period of
time,
15 9.4 removing the cleaning liquid from the discharge plate (31) by rotating the rotor (20),
characterized in
that a discharge device according to one of claims 1 to 8.