CLAIMS

1. **Clutch (4),** comprising a coupling element (7) and a counter coupling element (8), which are movable relative to each other in a first axial movement (19) to engage or disengage by using a manually operatable lever-arm-mechanism,
characterized in that
- the coupling element (7) can be moved along longitudinal serrations (10) of a driven member (2) by the manually operatable lever-arm-mechanism,
- the clutch (4) comprises a protrusion (12) that can perform a second axial movement (20) independent of the first axial movement (19),
- the protrusion (12) is movable into an axial engagement position (21) by the second axial movement (20).

2. Clutch (4) according to the previous claim, wherein
- the coupling element (7) and/or
- the counter coupling element (8)
is/are movable into an axial engagement position (22) by the first axial movement (19).

3. Clutch (4) according to any of the preceding claims,
- wherein a force and/or torque can be transmitted between the two elements (7, 8), as soon as the protrusion (12) is in the axial engagement position (21),
- preferably wherein the force and/or torque can be transmitted via the protrusion (12).

4. Clutch (4) according to any of the preceding claims,
- wherein the protrusion (12) is designed for direct engagement with the coupling element (7), in particular wherein the protrusion (12) is
- carried by the counter coupling element (8) and/or is

- movable relative to the counter coupling element (8), or
- wherein the protrusion (12) is designed for direct engagement with the counter coupling element (8), in particular wherein the protrusion (12) is
  - carried by the coupling element (7) and/or is
  - movable relative to the coupling element (7).

5. Clutch (4) according to any of the preceding claims, further comprising a handwheel (3) that is non-rotatably connected to the counter coupling element (8) or the coupling element (7),
- in particular wherein the protrusion (12)
  - is carried by the handwheel and/or
  - is axially movable relative to the handwheel (3).

6. Clutch (4) according to the previous claim,
- wherein the handwheel (3) is axially movable relative to the coupling element (7) or the counter coupling element (8) and can perform at least part of the second axial movement (20), in particular
  - wherein the protrusion (12) is non-movable relative to the handwheel (3) such that the protrusion (12) and the handwheel (3) perform the second axial movement (20) together
  - or
  - wherein the protrusion (12) is axially movable relative to the handwheel (3).

7. Clutch (4), in particular handwheel clutch (6), according to any of the preceding claims, wherein the coupling element (7) is designed
- to be engaged with another counter coupling element (9) of another clutch (4,5), in particular by featuring another

~~protrusion (12') for engagement with the another counter coupling element (9) and/or~~

~~– to be engaged with a driven member (2) of an actuator (1) or to form a driven member (2) of an actuator (1).~~

~~8. Clutch (4) according to any of the preceding claims, wherein the protrusion (12) is reversely movable along a coupling axis (11) of the clutch (4) against a restoring force provided by a restoring member (17'),~~

~~– preferably, wherein the restoring member (17') pushes the protrusion (12) into engagement with the coupling element (7) or the counter coupling element (8).~~

~~9. Clutch (4) according to any of the preceding claims, wherein an element (7, 8, 3) carrying the protrusion (12) features a recess (13) in which the protrusion (12) can move axially and relative to the element (7,8,3) along an axial range (14),~~

~~– in particular such that the element (7,8,3) can drive the protrusion (12) into rotation around a coupling axis (11) of the clutch (4), as long as the protrusion (12) is within the axial range (14).~~

~~10.~~1. **Actuator (1)** for actuating a control element, such as a valve, by a driven member (2) of the actuator (1), the actuator (1) comprising,

– a drive motor,

– a handwheel (3),

– a motor clutch (5) for interrupting a first drivetrain from the drive motor to the driven member (2), and

– a handwheel clutch (6) for interrupting a second drivetrain from the handwheel (3) to the driven member (2),

characterized in that

– the motor clutch (5) and the handwheel clutch (6) share a common coupling element (7), which can be switched from

- engagement with a counter coupling element (9) of the motor clutch (5) to
- engagement with a protrusion (12) of the handwheel clutch (6) that is axially movable along a coupling axis (11) of the handwheel clutch (6)

using a lever-arm-mechanism that can be manually operated,
- the handwheel clutch (6) is formed by the common coupling element (7) and by a corresponding counter coupling element (8) that is rotationally coupled to the handwheel (3),
- the coupling element (7) can be moved axially and relatively to the counter coupling element (8) along longitudinal serrations (10) of the driven member (2) in a first axial movement (19) using said lever-arm-mechanism, and
- said protrusion (12) of the handwheel clutch (6) can perform a second axial movement (20) independent of the first axial movement (19).

~~11.~~2. Actuator (1) according to ~~the previous~~ claim 1,
- wherein ~~the handwheel clutch is a clutch (4) according to one of the claims 1 to 9~~the coupling element (7) and the counter coupling element (8) of the handwheel clutch (6) are movable relative to each other in the first axial movement (19) to engage or disengage,~~.~~

and/or wherein
- the coupling element (7) and/or
- the counter coupling element (8) of the handwheel clutch (6)

is/are movable into an axial engagement position (22) by the first axial movement (19).

3. Actuator (1) according to claim 1,
- wherein the protrusion (12) is movable into an axial engagement position (21) by the second axial movement (20),

- in particular wherein a force and/or torque can be transmitted between the two elements (7, 8), as soon as the protrusion (12) is in the axial engagement position (21),
- preferably wherein the force and/or torque can be transmitted via the protrusion (12).

4. Actuator (1) according to claim 1,
- wherein the protrusion (12) is designed for direct engagement with the coupling element (7), in particular wherein the protrusion (12) is
  - carried by the counter coupling element (8) of the handwheel clutch (6) and/or is
  - movable relative to the counter coupling element (8) of the handwheel clutch (6), or
- wherein the protrusion (12) is designed for direct engagement with the counter coupling element (8) of the handwheel clutch (6), in particular wherein the protrusion (12) is
    - carried by the coupling element (7) and/or is
    - movable relative to the coupling element (7).

5. Actuator (1) according to claim 1,
wherein the handwheel (3) is non-rotatably connected to the counter coupling element (8) of the handwheel clutch (6) or the coupling element (7),
- in particular wherein the protrusion (12)
  - is carried by the handwheel (3) and/or
  - is axially movable relative to the handwheel (3).

6. Actuator (1) according to claim 1,
- wherein the handwheel (3) is axially movable relative to the coupling element (7) or the counter coupling element (8) of the handwheel clutch (6) and can perform at least part of the second axial movement (20), in particular

- wherein the protrusion (12) is non-movable relative to the handwheel (3) such that the protrusion (12) and the handwheel (3) perform the second axial movement (20) together

or

- wherein the protrusion (12) is axially movable relative to the handwheel (3).

7. Actuator (1) according to claim 1,

wherein the coupling element (7) is designed:

- to be engaged with the counter coupling element (9) of the motor clutch (5) by featuring another protrusion (12') for engagement with the counter coupling element (9) and/or

- to be engaged with a driven member (2) of the actuator (1) or to form a driven member (2) of an actuator (1).

8. Actuator (1) according to claim 1,

- wherein the protrusion (12) is reversely movable along a coupling axis (11) of the handwheel clutch (6) against a restoring force provided by a restoring member (17'),

- preferably wherein the restoring member (17') pushes the protrusion (12) into engagement with the coupling element (7).

9. Actuator (1) according to claim 1,

- wherein the coupling element (7) carrying the protrusion (12) features a recess (13) in which the protrusion (12) can move axially and relative to the coupling element (7) along an axial range (14),

- in particular such that the coupling element (7) can drive the protrusion (12) into rotation around a coupling axis (11) of the handwheel clutch (6), as long as the protrusion (12) is within the axial range (14).

~~12.~~10. Actuator (1) according to ~~one of the two preceding claims~~claim 1,

- wherein the protrusion (12) is axially movable relative to the handwheel (3) to come into engagement with the coupling element (7),

- ~~in particular~~ wherein~~,~~

~~-~~ the coupling element (7) is axially movable relative to the handwheel (3) to come into engagement

- with the protrusion (12) of the handwheel clutch (6) and/or

- with the counter coupling element (9) of the motor clutch (5)

or

- the counter coupling element (9) of the motor clutch (5) is axially movable relative to the handwheel (3) to come into engagement with the coupling element (7).

~~13.~~11. Actuator (1) according to ~~one of the preceding claims 10 to 12~~claim 1, wherein the coupling element (7) can be driven indirectly by the handwheel (3) via the protrusion (12) of the handwheel clutch (6),

- in particular without direct engagement between the handwheel (3) and the coupling element (7).

~~14.~~12. Actuator (1) according to ~~any of the claims 10 to 13~~claim 1, wherein the coupling element (7) is arranged in between the counter coupling element (9) of the motor clutch (5) and the protrusion (12)/the handwheel (3),

- in particular such that the protrusion (12) of the handwheel clutch (6) can only be engaged with the coupling element (7) as soon as the coupling element (7) is disengaged from the counter coupling element (9) of the motor clutch (5).

~~15.~~13. Actuator (1) according to ~~any of the claims 10 to 14~~claim 1, wherein an axial length (15) of a contact face (16) of the protrusion (12) is longer than a maximum depth of an axial engagement between the protrusion (12) and the coupling element (7),

- most preferably the axial length (15) is longer than the sum of a maximum depth of axial engagement between the protrusion (12) and the coupling element (7) and a minimum depth of axial engagement between the protrusion (12) and a counter coupling element (8) of the handwheel clutch (6).

~~16. **Method for engaging** a coupling element (7) and a counter coupling element (8) of a clutch (4), **characterized in that**~~

~~- the coupling element (8) and the counter coupling element (8) are moved relative to each other in a first axial movement (19) by manually operating a lever arm mechanism, by which the coupling element (7) is moved along longitudinal serrations (10) of a driven member (2), and~~

~~- the elements (7, 8) are engaged with each other by moving a protrusion (12) into an axial engagement position (21) in a second axial movement (20) independent of the first axial movement (19),~~

~~- in particular wherein the elements (7,8) rest, while the protrusion (12) is moving into the engagement position (21) and/or~~

~~- wherein the two elements (7,8) are rotated relative to each other to allow the second axial movement (20) of the protrusion (12).~~

~~17. **Method for switching between two drivetrains of an actuator (1)**~~

~~- the actuator (1) featuring a drive motor and a driven member (2) that can be driven by the drive motor,~~

~~**characterized in that**~~

~~– a coupling element (7) is disengaged from a counter coupling element (9) of a motor clutch (5) of the actuator (1) by manually operating a lever-arm-mechanism, by which the coupling element (7) is moved along longitudinal serrations (10) of the driven member (2), thereby interrupting a first drivetrain from the drive motor to the driven member (2),~~

~~– a handwheel (3) is rotated to drive a protrusion (12) of a handwheel clutch (6) of the actuator (1) around a coupling axis (11) until the protrusion (12) is oriented in a relative rotational coupling position (18) with respect to the coupling element (7), and~~

~~– the protrusion (12) is moved axially,~~

~~– preferably actuated by a second restoring member (17') and/or relative to the handwheel (3),~~

~~to directly engage with counter protrusions (26) of the coupling element (7) thereby establishing a second drivetrain from the handwheel (3) to the driven member (2).~~