



Abstract

A sealing ring 13 between two concentric mutually movable machine components 11, 12 is manufactured from a rubber elastic material and is inserted in a groove 14 which is opened from the first machine component 11 towards the second machine component 12. The sealing ring 13 exhibits an over dimension relative to the groove 14 in which the sealing ring 13 is to be inserted which is formed at the high pressure side region of the sealing ring 13. In the low pressure sided region of the sealing ring 13, the sealing ring 13 is manufactured with an under dimension. The outer peripheral surface 25 lying across from the bottom of the groove 18 exhibits, in the completely unloaded state of the sealing ring 13, an angle α_1 relative to a rotational axis 20 which, in the installed position of the sealing ring 13, is reduced to an angle α_2 . The second wedge-shaped gap 38, formed in the installed state of the sealing ring 13 in the vicinity of the low pressure side of the groove 17 and of the groove bottom 18, is also maintained in the pressurized state of the sealing ring 13. A first wedge-shaped gap 24 is formed between the peripheral surface 15 of the second machine component 12 and the sealing ring 13 which also is maintained under applied pressure.