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(54) Supporting shaft with expandable elements

(57) The invention is a supporting shaft (1) with expandable elements (4) comprising a cylindrical tubular member (2) with a plurality of expandable elements (4) installed on the outside of said tubular member (2) and connected to actuator units (6) that induce the radial displacement of said expandable elements (4) through operating means (7) controllable by an operator. Each actuator unit (6) comprises a plurality of slides (8) coupled slidingly and circumferentially to the outside of a central tubular element (9) that connects two facing and coaxial

circular flanges (10, 11) fixed to the inner surface (2a) of the tubular member (2). Each slide (8) is connected to an expandable element (4) by means of a connecting rod (21) the ends of which are hinged to the slide (8) and to the expandable element (4). These hinges (22, 23) allow for various positions of the connecting rod (21) coming between a radial position coinciding with the maximum extension of the expandable elements (4) and a sloping position coinciding with the retracted position of the expandable elements (4).

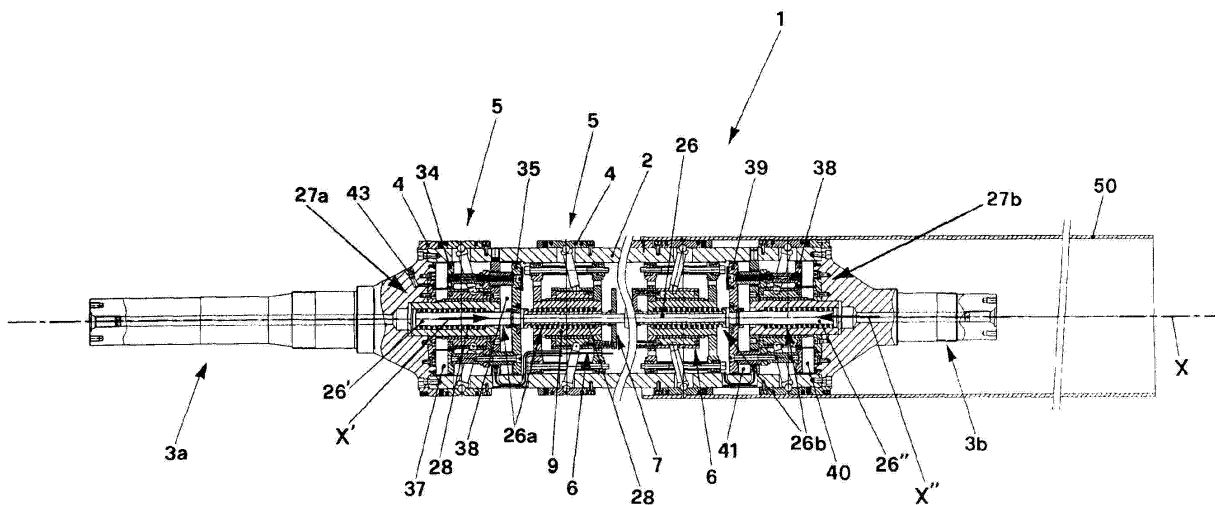


FIG.2

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ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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