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(54) Title: FIXTATION DEVICE AND INSTALLATION METHOD

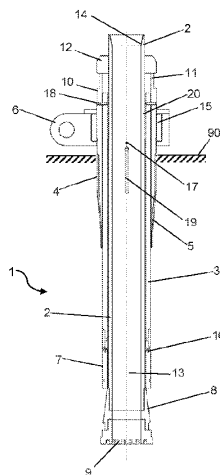


Fig. 2C

(57) Abstract: The invention relates to an elongate fixation device (1) for use in subsea anchoring, and a method for installation. The device (1) has a triple nested stem arrangement, the innermost stem (2) of which has a cutter (9) disposed at a distal end and a tapered section (8) located adjacent to and proximally behind the cutter (9). An intermediate stem (3) surrounds at least a central portion of the inner stem (2) and has one or more flareable cutting fingers (7) at its distal end. An outer stem (4) surrounds a proximal portion of the intermediate stem (3). The inner (2) and intermediate (3) stems are coupled by a first releasable coupling (17) which when released allows relative axial motion along a first distance. The outer and intermediate stems are coupled by a second releasable coupling (18) which when released allows relative axial motion along a second distance. The intermediate stem (3) is nested within the outer stem (4), in some cases for at least a majority of the outer stem (4). In some examples, the outer stem (4) has a rotationally driveable portion (10) and the inner stem (2) has a tensioning nut (12) for adjusting the relative axial positions of the inner (2) and outer (4) stems. The tensioning nut (12) and the driveable portion (10) are coupleable to a single rotational drive (23). The invention also relates a method for installation and to installation apparatus (21).

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