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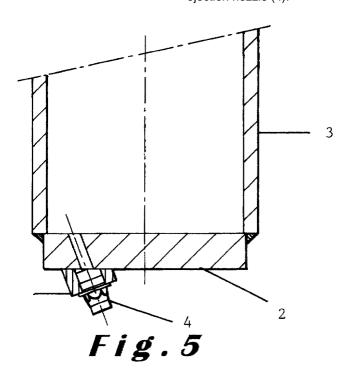
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## (54) Apparatus and method for producing a high pressure grouted foundation pile

(57) This invention relates to device for constructing a foundation pile, the device comprising a driving for rotating and displacing a drill head (2) into the ground, the drill head (2) comprising at least one hole (4) for ejecting a liquid into the ground surrounding the drill head (2), the at least one hole (4) being connected to a supply for the liquid, the drill head (2) being connectable to a pipe

(3), wherein the drill head (2) comprises at least one high pressure ejection nozzle (4) for ejecting a viscous, settable liquid into the ground surrounding the drill head to cut the ground, the pipe (3) having a hollow inner space connected to a high pressure device for supplying the viscous liquid at a pressure of at least 50 bar towards and through the inner space towards the at least one ejection nozzle (4).





## **EUROPEAN SEARCH REPORT**

Application Number EP 00 87 0269

Category   Citation of document with indication, where appropriate, or relevant passages   Relevant to claim
8 April 1999 (1999-04-08) * column 1, line 54 - column 4, line 6; figures 1,2 *  EP 0 833 011 A (FLOWTEX TECHNOLOGIE IMPORT VON) 1 April 1998 (1998-04-01) * column 6, line 45 - column 8, line 39; figure 1 *  DE 44 13 471 C (BILFINGER BERGER BAU) 13 July 1995 (1995-07-13) Y * column 1, line 50 - column 5, line 38; figures 1-3 *  PE 38 28 335 C (ISCHEBECK GMBH) 30 November 1989 (1989-11-30) A * the whole document *  US 5 645 376 A (TAKI OSAMU) 8 July 1997 (1997-07-08) A * column 2, line 46 - column 11, line 27; figures 1,9 *   BO2D7/24 E02D7/26 E02D3/12 E21D20/02 E21BF/20 E21BF

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 00 87 0269

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-07-2002

Patent document cited in search report			Publication date		Patent family member(s)	Publication date
DΕ	19732479	С	08-04-1999	DE	19732479 C1	08-04-1999
EP	0833011	A	01-04-1998	EP	0833011 A1	01-04-1998
DE	4413471	С	13-07-1995	DE	4413471 C1	13-07-1995
DE	3828335	С	30-11-1989	DE AT DE EP ES	3828335 C1 86356 T 58903641 D1 0355379 A2 2039765 T3	30-11-1989 15-03-1993 08-04-1993 28-02-1990 01-10-1993
US	5645376	A	08-07-1997	US	5411353 A	02-05-1995

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82