

Title (en)

Integrated system for the automatic implantation of metal tubes in sedimentary seabeds

Title (de)

Automatisches System um metallische Rohre in sedimentären Meeresboden einzutreiben

Title (fr)

Système automatique pour l'implantation de tubes métalliques dans des fonds de mer sédimentaires

Publication

EP 0897034 A1 19990217 (EN)

Application

EP 98600013 A 19980721

Priority

GR 97100318 A 19970814

Abstract (en)

This system consists of a mechanism with grabs (3,4), that can hold tightly a metal tube (7) from its upper part aiming at deploying it from the sea surface to the bottom in a vertical position. The grabs (3,4) hold also through a watertight seal the lower part of a flexible water tube (8) connected to the metal tube. By activating a water pump, pressurised water comes out from the lower end of the metal tube (7), washing out the sediment particles, gradually creating a narrow hole that allows the lowering of the tube (7) to the desired depth. This depth is controlled by shoes which prevent further penetration of the metal tube when they come in contact with the seabed. When the metal tube (7) reaches the desired depth a special tube release mechanism is activated and the main body of the system with the holding grabs (3,4) and the shoes as well as the flexible tube (8) are brought back to the vessel's working deck in order to be reused for a new tube implantation. The implantation of metal tubes in soft bottom substrates can offer a high level of protection to marine seagrass beds and nursery grounds from illegal trawling and also an alternative to conventional mooring systems (e.g. concrete blocks, sandbags, embedding anchors, etc.). <IMAGE> <IMAGE> <IMAGE>

IPC 1-7

E02D 13/04; **E02D 7/28**

IPC 8 full level

E02D 7/28 (2006.01); **E02D 13/04** (2006.01)

CPC (source: EP)

E02D 7/28 (2013.01); **E02D 13/04** (2013.01)

Citation (search report)

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