(11) **EP 2 634 313 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 09.07.2014 Bulletin 2014/28

(51) Int Cl.: **E02D** 5/80 (2006.01)

(43) Date of publication A2: **04.09.2013 Bulletin 2013/36**

(21) Application number: 13157515.1

(22) Date of filing: 01.03.2013

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR Designated Extension States:

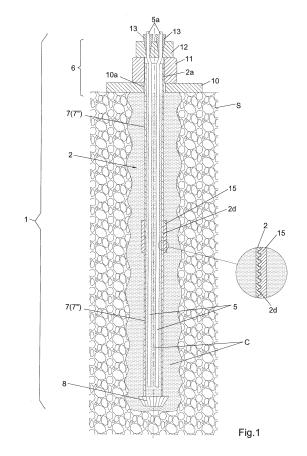
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(30) Priority: 02.03.2012 IT VI20120051

- (71) Applicant: Dalla Gassa srl 36073 Cornedo Vicentino (VI) (IT)
- (72) Inventor: Dalla Gassa, Gaetano 36073 CORNEDO VICENTINO (VI) (IT)
- (74) Representative: Bonini, Ercole Studio Bonini Srl Corso Fogazzaro, 8 36100 Vicenza (IT)

(54) Improved anchoring element for ground consolidation

(57)The invention is an anchoring element (1; 30) for making ground (S) containment and consolidation structures, comprising: a tubular bar (2) with mainly longitudinal development driven into the ground (S), in which it is constrained by means of a cement mix; one or more cables (5) arranged inside the bar (2) and constrained in the cement mix (C) present inside the bar (2); and a fixing unit (6) suited to fix the anchoring element (1; 30) to the ground (S). The fixing unit (6) is connected to the ends (5a, 2a) of the cables (5) and of the bar (2) projecting from the ground (S). The cement mix (C) fills the bar (2) completely and the cables (5) are buried in the cement mix (C) for their entire length. According to a variant embodiment, the cement mix (C) fills the bar (2) partially, for a section of its length (Cb) in which the ends of the cables (5) are immersed.



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EUROPEAN SEARCH REPORT

Application Number EP 13 15 7515

DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate, Category EPO FORM 1503 03.82 (P04C01)

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Category	Citation of document with in of relevant passa	dication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 40 36 721 A1 (DA VALDAGNO [IT]) 20 Jr * the whole documen	une 1991 (1991-06-20)	1-12	INV. E02D5/80
A,D	WO 2005/090690 A1 (GMBH [AT]; MOCIVNIK EGGER-MOCIVNIK) 29 September 2005 (; * the whole documen	2005-09-29)	1-12	
				TECHNICAL FIELDS
				SEARCHED (IPC)
	The present search report has b	een drawn up for all claims		
	Place of search	Date of completion of the search	<u>' </u>	Examiner
	Munich	27 May 2014	Fri	edrich, Albert
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anoth ment of the same category nological background written disclosure mediate document	L : document cited fo	eument, but publise e n the application or other reasons	shed on, or

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

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036721 A1 20-06-1991 DE 4036721 A1 IT 1236744 B 005090690 A1 29-09-2005 AT 505959 A2 AU 2005224274 A1 CA 2559446 A1 CN 1934319 A EP 1727943 A1 HR P20060333 A2	1236744 B 31-03
AU 2005224274 A1 CA 2559446 A1 CN 1934319 A EP 1727943 A1 HR P20060333 A2	2005224274 A1 29-09 2559446 A1 29-09 1934319 A 21-03 1727943 A1 06-12 P20060333 A2 30-11 2007530824 A 01-11 20070010030 A 19-01
	2005090690 A1 29-09