1 Publication number:

0 097 525

(12)

EUROPEAN PATENT APPLICATION

21 Application number: 83303569.4

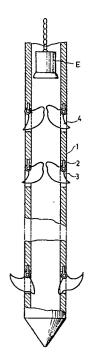
f) Int. Cl.3: E 02 D 5/54

② Date of filing: 21.06.83

30 Priority: 21.06.82 US 390199

- Applicant: Hsiao, Chi-Lung, 5F. No. 19, Alley 7, Lane 102 Kuang-Ming Street, Hsin-Tien Taipei (TW) Applicant: Wang, Su-Jen, 9-5F, No. 63, Sec. 2 Chang An East Road, Taipei (TW)
- Date of publication of application: 04.01.84
 Bulletin 84/1
- (2) Inventor: Hsiao, Chi-Lung, 5F., No. 19, Alley 7 Lane 102, Kuang-Ming St., Hsin-Tien Taipei (TW)
- Ø Designated Contracting States: AT CH DE FR IT LI NL SE
- Representative: Arthur, Bryan Edward et al, Withers & Rogers 4 Dyer's Buildings Holborn, London EC1N 2JT (GB)

- 88 Date of deferred publication of search report: 08.02.84 Bulletin 84/6
- 54 Piles.
- © Piles for acting as supports or strengthening members comprise hollow, rigid tubular members (1) including a pointed end and a plurality of holes (3) in which are mounted pivotable sharp members (4). The pile is inserted into a preformed hole in the ground (A) with the sharp members (4) retracted and a heavy tool (E) is passed through the pile to force the sharp members (4) outwardly into the ground. The piles have much improved bearing load capacity.





EUROPEAN SEARCH REPORT

0 0 9AP/11502number

EP 83 30 3569

DOCUMENTS CONSIDERED TO BE RELEVANT				
Category		ith indication, where appropriate, want passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
х	US-A-1 982 687 * Page 1, li figures 1-3 *	(O'BRIEN) nes 62-63,78-107;	1,3	E 02 D 5/54
Х		 EN-WERKE) nes 7-28; page 4, 6; figures 1,2 *	1,2,4	
A	graph 4; page umn, paragraph left-hand columnage 2, right-graph 9; page 2	(BRAITHWAITE) hand column, para- 1, right-hand col- hs 1,2; page 2, mn, paragraph 10; hand column, para- ge 3, right-hand aph 9; figures 1-3	1,2	
	-			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
A	GB-A- 861 816 * Page 1, listines 4-26; fig	nes 48-63; page 2,	2	E 02 D
A	US-A-3 763 655	 (GALUSKA)		
	~ ~ ~ ~			
		•		
· · · · · · · · · · · · · · · · · · ·	The present search report has b	een drawn up for all claims		
Place of search THE HAGUE Date of completing 14-11		Date of completion of the search 14-11-1983	RUYMB	Examiner EKE L.G.M.
Y: part doc A: tech O: non	CATEGORY OF CITED DOCL ticularly relevant if taken alone ticularly relevant if combined w ument of the same category anological background -written disclosure rmediate document	E : earlier pat after the fi ith another D : document L : document	ent document, É lling date cited in the app cited for other r f the same pater	ring the invention out published on, or lication easons