



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets



(11)

EP 2 295 674 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
16.04.2014 Bulletin 2014/16

(51) Int Cl.:
E04G 21/20^(2006.01)

(43) Date of publication A2:
16.03.2011 Bulletin 2011/11

(21) Application number: 10172864.0

(22) Date of filing: 16.08.2010

(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 SE SI SK SM TR**

Designated Extension States:
BA ME RS

(30) Priority: 19.08.2009 FI 20095855

(71) Applicant: **Maxit oy ab**
00381 Helsinki (FI)

(72) Inventor: **Hannula, Tero**
33480, Ylöjärvi (FI)

(74) Representative: **Heinänen, Pekka Antero et al**
Heinänen Oy Patent Agency
Airport Plaza
Äyritie 8 D
01510 Vantaa (FI)

(54) Hopper for spreading mortar

(57) The invention relates to a spreading cradle for spreading solid and/or liquid materials, such as mortar-like materials, which includes at least an adjustment mechanism for the mutual distance of mortar ridges being spread (1, 6), an adjustment mechanism for mortar-ridge height (2), and which spreading cradle includes an opening and closing mechanism of mortar-ridge flow (3, 4), and one or several mortar ridges are spreadable with the spreading cradle at different distances from each other, if required, such that the height and/or width of the mortar ridge and/or its position in the perpendicular direction in relation to the mortar spreading direction are variable by the spreading cradle.

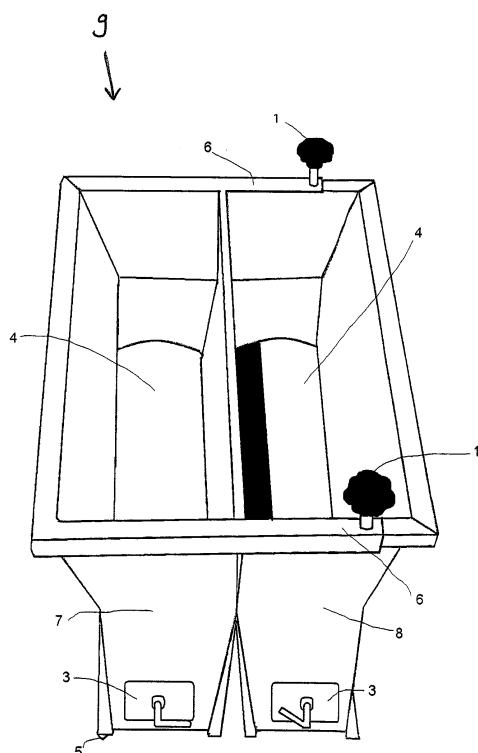


FIG.1

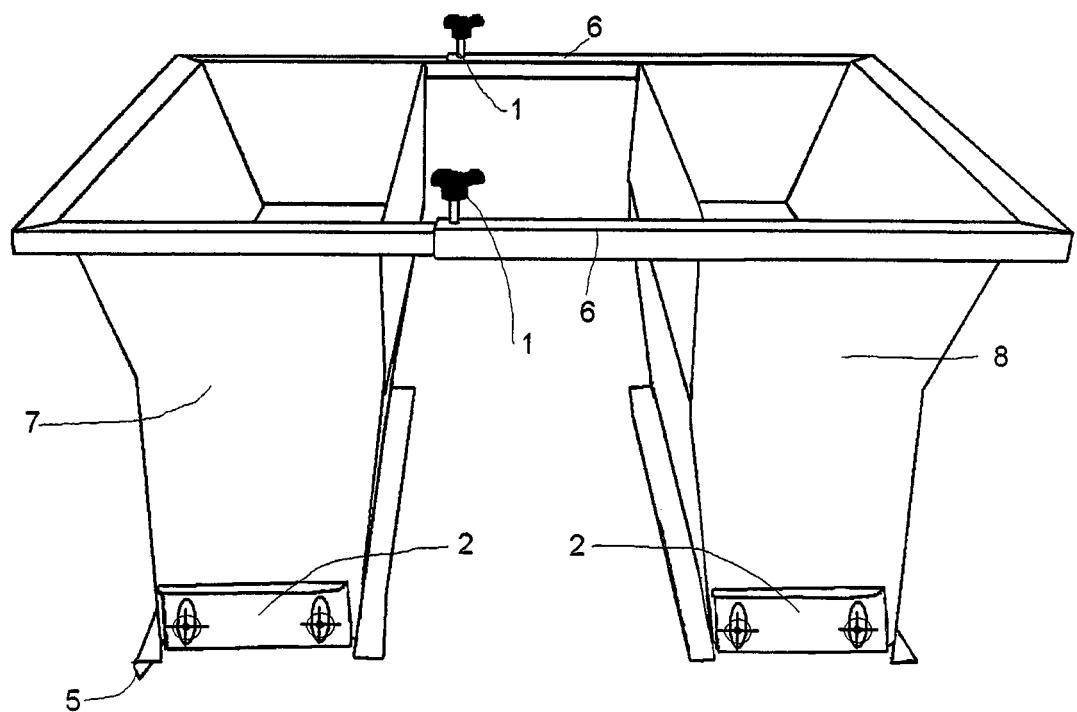


FIG.2





EUROPEAN SEARCH REPORT

Application Number
EP 10 17 2864

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	GB 765 633 A (SYLVIO MAURO) 9 January 1957 (1957-01-09) * the whole document * -----	1-12	INV. E04G21/20
A	US 3 887 114 A (VILLANOVICH AUGUSTO) 3 June 1975 (1975-06-03) * the whole document * -----	1-12	
A	US 4 352 445 A (CUSUMANO PHILIP ET AL) 5 October 1982 (1982-10-05) * abstract; figures * -----	1-12	
			TECHNICAL FIELDS SEARCHED (IPC)
			E04G
The present search report has been drawn up for all claims			
1	Place of search	Date of completion of the search	Examiner
	Munich	5 March 2014	Scharl, Willibald
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
Y : particularly relevant if combined with another document of the same category		E : earlier patent document, but published on, or after the filing date	
A : technological background		D : document cited in the application	
O : non-written disclosure		L : document cited for other reasons	
P : intermediate document		
		& : member of the same patent family, corresponding document	

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

EP 10 17 2864

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.

05-03-2014

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
GB 765633	A	09-01-1957	NONE			
US 3887114	A	03-06-1975	CA US	975140 A1 3887114 A	30-09-1975 03-06-1975	
US 4352445	A	05-10-1982	NONE			