



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 221 507 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
17.07.2002 Bulletin 2002/29

(51) Int Cl.7: **E01C 23/22, E01C 23/16**

(43) Date of publication A2:
10.07.2002 Bulletin 2002/28

(21) Application number: **02076059.1**

(22) Date of filing: **18.04.1997**

(84) Designated Contracting States:
DE FR GB

(30) Priority: **19.04.1996 US 15637 P**
17.04.1997 US 838248

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
97302673.5 / 0 807 714

(71) Applicant: **GRACO INC.**
Minneapolis, Minnesota 55434 (US)

(72) Inventors:

- **Lanerd, Lawrence L.**
Corcoran, Minnesota 55340 (US)
- **Schroeder, James C.**
Ramsey, Minnesota 55303 (US)
- **Voigt, Bradley K.**
Maple Lake, Minnesota 55458 (US)

(74) Representative: **Sturt, Clifford Mark et al**
Miller Sturt Kenyon
9 John Street
London WC1N 2ES (GB)

(54) Vehicle towed apparatus for striping of roads

(57) A line striper 10 is attached to a vehicle 20 with a two point hitch 18 and has a swivelable rotatable wheel 24 mounted thereunder to support the striper on the ground. A main beam L is releasably clamped and may be slid from side to side depending on operator preference. The gun boom U may then be located on the de-

sired side. A delay feature on the control allows the operator to look ahead on a sighting camera and pick the point at which he or she desires striping to start (or stop or any other operation). The controller then compensates for the calibrated distance between the sight point and the spray gun (V,W) and then starts and stops the gun at the appropriate time given road speed.

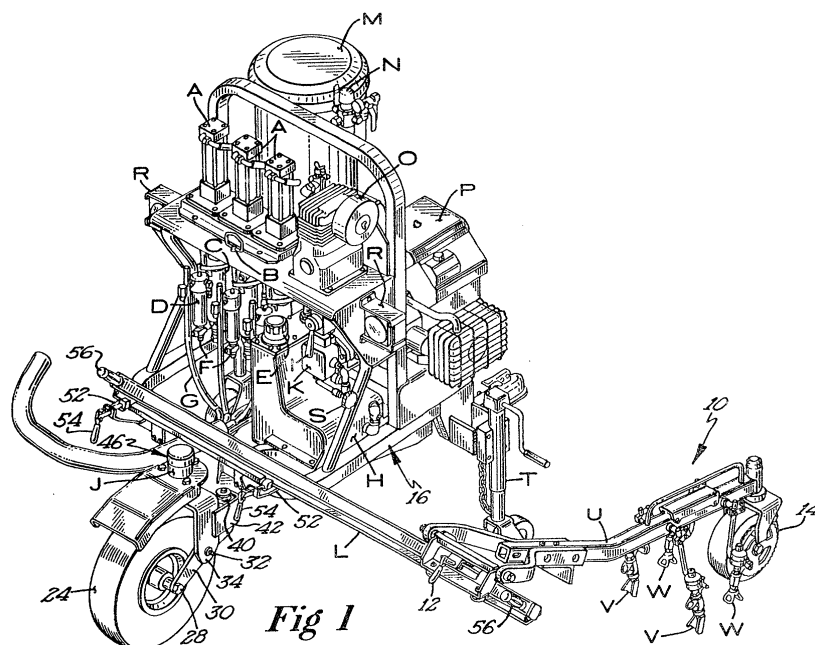


Fig 1

EP 1 221 507 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 07 6059

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,A	US 5 368 232 A (SCHROEDER) 29 November 1994 (1994-11-29) * the whole document *	1	E01C23/22 E01C23/16
A	US 4 624 602 A (KIEFFER) 25 November 1986 (1986-11-25) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E01C
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		24 May 2002	Dijkstra, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/02 (P04001)

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

EP 02 07 6059

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.

24-05-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5368232	A	29-11-1994	NONE	
US 4624602	A	25-11-1986	NONE	

EPO FORM P0459

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