11 Publication number:

0 271 316 A3

(12)

EUROPEAN PATENT APPLICATION

21 Application number: 87310777.5

(a) Int. Cl.4: B05B 7/04

2 Date of filing: 08.12.87

Priority: 11.12.86 US 940290

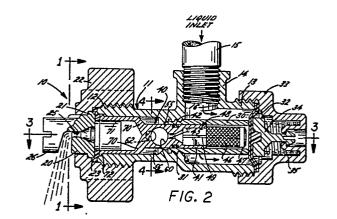
Date of publication of application:15.06.88 Bulletin 88/24

Designated Contracting States:
DE FR GB IT NL SE

Date of deferred publication of the search report: 10.01.90 Bulletin 90/02

- 7) Applicant: SPRAYING SYSTEMS CO. North Avenue at Schmale Road Wheaton, IL 60187(US)
- Inventor: Haruch, James 1570 Selby Road Naperville Illinois 605640(US)
- Representative: Spall, Christopher John et al BARKER, BRETTELL & DUNCAN 138 Hagley Road
 Edgbaston Birmingham B16 9PW(GB)

- 64 Convertible spray nozzle.
- (57) A spray nozzle in which a nozzle body is formed with an elongated chamber (56) having an air inlet port (62) communicating with the side of the chamber, a liquid inlet port (16) communicating with one end of the chamber, and a nozzle tip (20) communicating with the opposite end of the chamber. The spray nozzle may be operated in a hydraulic or nonair assisted mode and with a relatively high flow rate by closing off the air inlet port and causing liquid to stream directly from the liquid inlet port to the nozzle tip. The nozzle also may be converted to an air assisted mode in which a stream of pressurized air is injected into the air inlet port and impinges transversely against the liquid stream to preliminarily break up or preatomize the liquid before the liquid is discharged from the nozzle tip. The conversion is deffected by placing into the nozzle body (11) an insert (40) for reducing the flow rate of the liquid stream and for causing the air and liquid streams to interact to effect preatomization of the liquid.



EP 0



EUROPEAN SEARCH REPORT

EP 87 31 0777

Category	Citation of document with i	ndication, where appropriate,	Relevant	CLASSIFICATION OF TH
	of relevant pa		to claim	APPLICATION (Int. Cl. 4)
A	GB-A-2 075 369 (SP * Figures 1,10; pag page 2, lines 32-36 5-21; page 6, lines	; page 3, lines	1,8,11	B 05 B 7/04
A	GB-A-2 157 591 (SP * Abstract; figure 	RAYING SYSTEMS CO.) 1 *	1	
·				
}		•		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
		and the same of th		B 05 B
·-				
				./
	The present search report has b			
		Date of completion of the search		Examiner STAVINO L.
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category		E : earlier pate after the fil other D : document c L : document c	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	
A: technological background O: non-written disclosure P: intermediate document			the same patent famil	v correction