

(1) Publication number:

0 411 542 A3

(12)

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 90114603.5

51 Int. Cl.5: **H01C** 17/04, H01C 3/18

(22) Date of filing: 30.07.90

30 Priority: 02.08.89 IT 2142889

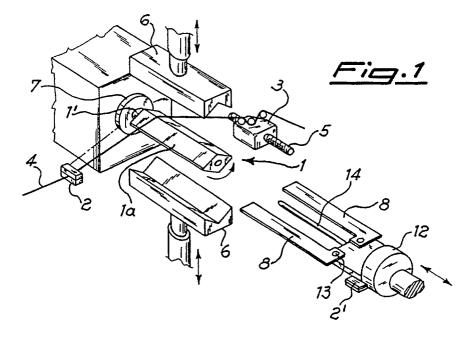
Date of publication of application: 06.02.91 Bulletin 91/06

Designated Contracting States:
AT BE CH DE DK ES FR GB GR IT LI NL SE

Bate of deferred publication of the search report: 22.05.91 Bulletin 91/21

- Applicant: Roggia, Francesco Via Salvo d'Acquisto 3 I-20062 Cassano d'Adda (Milano)(IT)
- Inventor: Roggia, Francesco
   Via Salvo d'Acquisto 3
   I-20062 Cassano d'Adda (Milano)(IT)
- 74 Representative: Marietti, Giuseppe STUDIO ASSOCIATO MARIETTI & PIPPARELLI, Viale Caldara 38 I-20122 Milano(IT)
- Process and apparatus for producing spiral resistors.
- (57) A process for producing spiral electrical resistors, comprises the steps of: winding a preset length of resistive wire (4) with a presettable pitch around a swift (1) having adjustable width to obtain a plurality of turns; blocking in position said turns on at least part (1a) of said swift; reducing the width of said swift; engaging at least some of said turns with at

least an electrically insulating support (19; 23); releasing said turns from said swift; withdrawing the resistor (18; 20) thus obtained from the swift having reduced width; and repeating said steps, restoring the original width of the swift before winding the subsequent length of wire.





## EUROPEAN SEARCH REPORT

EP 90 11 4603

DOCUMENTS CONSIDERED TO BE RELEVANT				OLAGOIFICATION OF THE	
tegory		n indication, where appropriate, rant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.5)	
Х	DE-A-2 531 854 (BOSCH-S * Figure 15; page 5 *	BIEMENS)	1,11	H 01 C 1/04 H 01 C 3/18 H 05 B 3/16	
Α			6,7	1.00 2 3/10	
X	DE-A-2 615 013 (DAVID & * Figure 3; page 5 *	BAADER - DBK)	1,11		
Α	-		6,7		
A	US-A-2 645 429 (GENERA – –	L ELECTRIC) · – – –			
				TECHNICAL FIELDS SEARCHED (Int. CI.5)	
				H 05 B H 01 C H	
				01 F	
		- The state of the			
	The present search report has b	een drawn up for all claims			
	Place of search	Date of completion of search	1	Examiner	
The Hague		28 February 91		MES L.A.	

- Y: particularly relevant if combined with another document of the same catagory
- A: technological background
- O: non-written disclosure
- P: intermediate document
- T: theory or principle underlying the invention

- D: document cited in the application
- L: document cited in the application
- &: member of the same patent family, corresponding document