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(72) Inventors:
• **Jacovino, Elio**
20052 Monza (Mi) (IT)
• **Radaelli, Claudio**
20063 Seveso (Mi) (IT)

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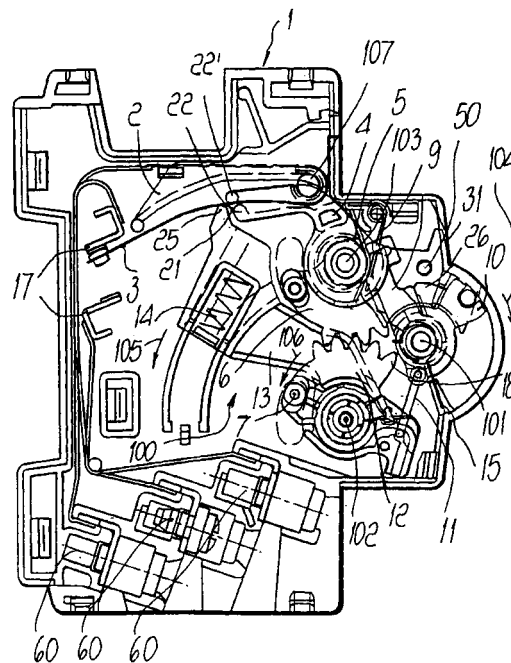
(74) Representative: **Giavarini, Francesco**
ABB Ricerca S.p.A.
Viale Edison, 50
20099 Sesto San Giovanni (MI) (IT)

(71) Applicant: **ABB Elettrocondutture S.p.A.**
20010 Vittuone (Mi) (IT)

(54) **Accessory device for a magnetothermal circuit breaker**

(57) An accessory device for indicating the state of a magnetothermal circuit breaker, particularly of the bipolar type with phase and neutral poles, which is associated therewith, comprising an insulating casing which contains fixed contacts and a corresponding moving contact and connection terminals. The peculiarity of the device consists in that it comprises:

- a) a kinematic mechanism which comprises:
- means for coupling to the circuit breaker;
 - means for actuating the moving contact;
 - means for the local visual indication of a triggered circuit breaker state;
- b) a mechanism for testing the device.



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EUROPEAN SEARCH REPORT

Application Number
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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.6)
X	EP 0 394 144 A (MERLIN GERIN) 24 October 1990 (1990-10-24)	1,4-9, 12,13	H01H71/46 H01H71/04
Y	* column 3, line 2 - column 5, line 53; figures 1,2 *	10,11,14	
Y	FR 2 647 951 A (MERLIN GERIN) 7 December 1990 (1990-12-07) * page 4, line 24 - page 7, line 3; figures 1-4 *	10,11	
Y	EP 0 326 446 A (MERLIN GERIN) 2 August 1989 (1989-08-02)	14	
A	* the whole document *	1-13	
A	WO 96 28836 A (FELTEN & GUILLEAUME AG OESTER) 19 September 1996 (1996-09-19) * page 3, line 31 - line 40 * * page 4, line 25 - page 5, line 1; figures 2,6 *	2,3	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H01H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 2 March 2000	Examiner Ramírez Fueyo, M
CATEGORY OF CITED DOCUMENTS		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 & : member of the same patent family, corresponding document	
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			

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

EP 99 20 0908

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02-03-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0394144 A	24-10-1990	FR 2646282 A	26-10-1990
		DE 69015415 D	09-02-1995
		DE 69015415 T	13-07-1995
		ES 2068365 T	16-04-1995
FR 2647951 A	07-12-1990	NONE	
EP 0326446 A	02-08-1989	FR 2626714 A	04-08-1989
		CN 1036660 A,B	25-10-1989
		DE 68905497 T	21-10-1993
		JP 1225030 A	07-09-1989
		JP 2933632 B	16-08-1999
WO 9628836 A	19-09-1996	AT 402582 B	25-06-1997
		AT 45895 A	15-10-1996
		AT 171811 T	15-10-1998
		AU 697688 B	15-10-1998
		AU 4779196 A	02-10-1996
		DE 59600632 D	05-11-1998
		EP 0815576 A	07-01-1998
		ES 2123340 T	01-01-1999

EPO FORM P0459

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