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(11) **EP 1 449 566 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**13.10.2004 Bulletin 2004/42**

(51) Int Cl.7: **A62C 3/02**

(43) Date of publication A2:  
**25.08.2004 Bulletin 2004/35**

(21) Application number: **04386007.1**

(22) Date of filing: **18.02.2004**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
HU IE IT LI LU MC NL PT RO SE SI SK TR**  
Designated Extension States:  
**AL HR LT LV MK**

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(30) Priority: **21.02.2003 GR 2003100093**

(54) **Detector of heat sources**

(57) A detector of heat sources, capable of locating a forest fire from afar, even if the fire is still in its early stages, and acting as a deterrent against attempted arson, one of the most common causes of forest fires.

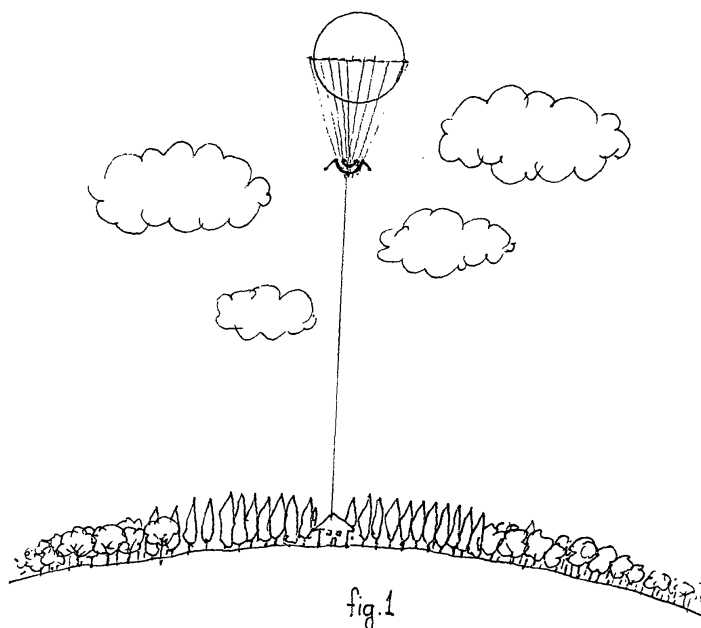
The proposed detector may also be used for defensive military purposes, as well as for the protection of isolated buildings and installations.

It may be installed at a high point or (still better) suspended from an airborne balloon (figure 1).

It consists of two polyhedral surfaces 4.1 and 4.3 (figure 4), one placed inside the other. Each face of the outside surface is a converging lens 3.1 (figure 3), while

each face of the inside surface carries (at its center) a small photosensitive surface 4.2, which has some property that varies with the intensity of the incident radiation (e.g. photoresistance 2a and 2b). This allows the creation of an image of the ambient area by synthesizing the individual traces formed on the photosensitive surfaces, in a way similar to that of a television image.

Finally, the detector will be equipped with television cameras sensitive to infrared radiation, capable of taking pictures at nighttime and from afar. All data collected will be controlled and processed by a computer installed at the observation post.



EP 1 449 566 A3



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# EUROPEAN SEARCH REPORT

Application Number  
EP 04 38 6007

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)
Y	FR 2 669 455 A (DASSAULT ELECTRONIQUE) 22 May 1992 (1992-05-22) * the whole document *	1-5	A62C3/02
Y	EP 0 922 970 A (MANU LORRAINE) 16 June 1999 (1999-06-16) * the whole document *	1-5	
Y	US 5 936 245 A (RENOT ANDRE ET AL) 10 August 1999 (1999-08-10) * the whole document *	1-5	
A	FR 2 750 870 A (T2M AUTOMATION) 16 January 1998 (1998-01-16)		
A	FR 2 696 939 A (BERTIN & CIE) 22 April 1994 (1994-04-22)		
A	FR 2 679 779 A (LANG JACQUES) 5 February 1993 (1993-02-05)		
A	EP 0 656 532 A (MURATA MANUFACTURING CO) 7 June 1995 (1995-06-07)		TECHNICAL FIELDS SEARCHED (Int.Cl.7)  A62C G08B G01V
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 August 2004	Examiner Triantaphillou, P
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03/82 (P04C01)

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

EP 04 38 6007

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  
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24-08-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2669455	A	22-05-1992	FR 2669455 A1	22-05-1992
			DE 69122060 D1	17-10-1996
			DE 69122060 T2	13-03-1997
			EP 0490722 A1	17-06-1992
-----				
EP 0922970	A	16-06-1999	FR 2772139 A1	11-06-1999
			AT 195589 T	15-09-2000
			DE 69800260 D1	21-09-2000
			DE 69800260 T2	04-01-2001
			EP 0922970 A1	16-06-1999
			ES 2151315 T3	16-12-2000
-----				
US 5936245	A	10-08-1999	FR 2749177 A1	05-12-1997
			CA 2208185 A1	03-12-1997
			DE 69725384 D1	13-11-2003
			DE 69725384 T2	05-08-2004
			EP 0811400 A1	10-12-1997
			ES 2208840 T3	16-06-2004
-----				
FR 2750870	A	16-01-1998	FR 2750870 A1	16-01-1998
			DE 69711283 D1	02-05-2002
			EP 0818766 A1	14-01-1998
-----				
FR 2696939	A	22-04-1994	FR 2696939 A1	22-04-1994
			WO 9408660 A1	28-04-1994
-----				
FR 2679779	A	05-02-1993	FR 2679779 A1	05-02-1993
			AU 2435792 A	02-03-1993
			WO 9302749 A1	18-02-1993
-----				
EP 0656532	A	07-06-1995	JP 7159236 A	23-06-1995
			DE 69421365 D1	02-12-1999
			DE 69421365 T2	08-06-2000
			EP 0656532 A2	07-06-1995
			US 5565683 A	15-10-1996
-----				

EPO FORM P0459

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