



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 01 7049

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)
X	DE 25 41 632 A (SCHIRNECKER) 24 March 1977 (1977-03-24)	1	F42B12/34
Y	* page 16, line 14 - page 17, line 26; figures 7-9 *	2-7	

X	FR 2 671 620 A (KALADGEW) 17 July 1992 (1992-07-17)	1	
	* page 2, line 12 - page 3, line 41; figure 2 *		

Y	DE 197 11 344 A (KOEPPEN) 25 September 1997 (1997-09-25)	2,5	
A	* column 3, line 36 - line 67; figures 6-11 *	1	

Y	US 6 349 651 B1 (MARTINEZ GARCIA) 26 February 2002 (2002-02-26)	3,4	
A	* column 2, line 35 - column 3, line 7; figure 1 *	1	

Y	US 1 493 614 A (DICKERMAN) 13 May 1924 (1924-05-13)	6,7	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	* column 3, line 49 - line 53; claim 4; figures 2,3 *	1	F42B

A	US 44 492 A (WILLIAMS) 27 September 1864 (1864-09-27)	1-7	
	* the whole document *		

A	US 854 923 A (BROAD) 28 May 1907 (1907-05-28)	1-7	
	* the whole document *		

A	US 5 149 913 A (ARAKAKI) 22 September 1992 (1992-09-22)		

The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		23 June 2004	Giesen, M
<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 & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/02 (P04C01)

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

EP 03 01 7049

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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23-06-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 2541632 A	24-03-1977	DE 2541632 A1	24-03-1977
		AT 351970 B	27-08-1979
		AT 584476 A	15-01-1979
		FI 762268 A ,B,	10-02-1977
		FR 2321108 A1	11-03-1977
		FR 2513368 A1	25-03-1983
		GB 1561743 A	27-02-1980
		SE 7608775 A	10-02-1977
		US 4136616 A	30-01-1979
FR 2671620 A	17-07-1992	FR 2671620 A1	17-07-1992
DE 19711344 A	25-09-1997	DE 19711344 A1	25-09-1997
US 6349651 B1	26-02-2002	DE 20019831 U1	15-03-2001
		TR 200003454 U	21-06-2001
US 1493614 A	13-05-1924	NONE	
US 44492 A		NONE	
US 854923 A		NONE	
US 5149913 A	22-09-1992	NONE	