



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 99 20 1142

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	US 5 701 115 A (HEWLIN JOHN P ET AL) 23 December 1997 (1997-12-23) * figure 1 * * column 3, line 1-10,20-25,45-60 * ---	1,3,9-12	G08B25/04 G08B27/00 E06B9/00
Y	US 4 758 824 A (YOUNG PHILIP) 19 July 1988 (1988-07-19) * figure 1 * * column 1, line 1-65 * ---	1,3	
Y	US 5 751 210 A (KOSICH JOSEPH) 12 May 1998 (1998-05-12) * figures 2-4 * * column 1, line 14-20 * * column 2, line 10-20 * ---	9,10	
Y	US 5 416 725 A (PACHECO STEVEN M ET AL) 16 May 1995 (1995-05-16) * figures 1,7B,8D * * column 1, line 25-40 * * column 13, line 15-30 * * column 14, line 50-60 * ---	11,12	
A	US 5 402 101 A (BERGER HORST ET AL) 28 March 1995 (1995-03-28) * figures 1,2 * * column 1, line 10-30 * * column 2, line 25-70 * -----	2,4-8	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 December 2000	Examiner Coffa, A
<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 82 (P04C01)

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

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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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06-12-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5701115 A	23-12-1997	NONE	
US 4758824 A	19-07-1988	EP 0218341 A GB 2180976 A	15-04-1987 08-04-1987
US 5751210 A	12-05-1998	US 5608375 A US 5982275 A CA 2168511 A CN 1131777 A ES 2121532 A GB 2299191 A,B JP 8273086 A	04-03-1997 09-11-1999 21-09-1996 25-09-1996 16-11-1998 25-09-1996 18-10-1996
US 5416725 A	16-05-1995	AU 5537594 A WO 9505627 A US 5499196 A	14-03-1995 23-02-1995 12-03-1996
US 5402101 A	28-03-1995	DE 4036639 A EP 0485878 A AT 163103 T DE 59108931 D ES 2114872 T HK 1004925 A	21-05-1992 20-05-1992 15-02-1998 12-03-1998 16-06-1998 11-12-1998