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INTERNATIONAL SEARCH REPORT

International Application No
CT/US2005/017083

A. CLASSIFICATION OF SUBJECT MATTER

C23C14/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 884 787 A (KUEHNLE ET AL) 20 May 1975 (1975-05-20) column 9, line 6 - line 63; figure 2	1-8, 10-17
Y	column 8, line 31 - line 34 -----	9
Y	US 6 579 422 B1 (KAKINUMA MASAYASU) 17 June 2003 (2003-06-17) cited in the application column 6, line 63 - column 7, line 6 -----	9

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- * & * document member of the same patent family

Date of the actual completion of the international search

10 January 2006

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/017083

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3884787	A	20-05-1975	AT 341335 B 10-02-1978
			AT 9674 A 15-05-1977
			BE 809464 A1 08-07-1974
			CA 1018475 A1 04-10-1977
			CH 597622 A5 14-04-1978
			DD 109035 A5 12-10-1974
			DE 2400587 A1 18-07-1974
			FR 2322667 A1 01-04-1977
			GB 1461921 A 19-01-1977
			IL 43966 A 31-12-1976
			IT 1002650 B 20-05-1976
			JP 1153087 C 30-06-1983
			JP 49104972 A 04-10-1974
			JP 57047267 B 08-10-1982
			LU 69122 A1 09-12-1975
			NL 7317670 A 16-07-1974
			SE 392919 B 25-04-1977
US 6579422	B1	17-06-2003	EP 1115268 A1 11-07-2001
			WO 0105194 A1 18-01-2001