

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/00098

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04Q 7/20; H04B 7/00
 US CL : 455/426.1, 426.2, 461-465, 515-518, 520

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)
 U.S. : 455/426.1, 426.2, 461-465, 515-518, 520

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | US 5,125,101 A (JOHNSON et al) 23 June 1992, see 2, line 50-col.6, line 29. | 27-35 |
| X | US 5,784,388 A (KNOX) 21 July 1998, see col. 3, line 63-col. 4, line 16; col. 8, line 38-col. 12, line 30. | 1-35 |
| Y | US 5,481,545 A (MAEDJAJA et al.) 02 January 1996, see col. 2, line 62-col. 5, line 14; col. 7, line 15-col. 8, line 61. | 1-35 |
| Y | US 6,148,064 A (CHRSTENSEN et al.) 14 November 2000, see 3, line 25-col. 5, line 15; col. 6, line 47-col. 8, 36. | 1-35 |
| A | US 6,141,347 A (SHAUGHNESSY et al.) 31 October 2000, see col. 5, line 35-col. 8, line 36. | 1-35 |
| A | EP 0 748 137 A2 (METHA) 11 December 1996, see col. 2, line 26-col. 3, line 12; col. 5, lin 24-col. 7, line 5. | 1-35 |
| Y | WO 98/49842 A2 (SUTANTO et al.) 05 November 1998, see page 4, line 13-page 5, line 17; page 7, line 19-page 8, line 30 | 1-35 |

Further documents are listed in the continuation of Box C.

See patent family annex.

| * Special categories of cited documents: | |
|---|--|
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
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| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

12 June 2003 (12.06.2003)

Date of mailing of the international search report

11 JUL 2003

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