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**(88) Date of publication of the international search report:**

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/37869

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04J 3/16**(2006.01)

USPC: 370/465

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. : 370/465, 338, 401

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 6,243,581 B1 (JAWANDA) 05 June 2001 (05.06.2001), columns 2 and 3; Figure 1.	1,2,8-12, 16-18, 21,22,65-67
X	US 2003/0012156 A1 (FUKUDA) 16 January 2003 (16.01.2003), page 1, paragraphs 4-10; page 3, paragraph 43; Figures 1, 3, 8.	25, 26, 28-30,32-34
A, P	US 2004/0114553 A1 (JIANG et al) 17 June 2004 (17.06.2004), page 1, paragraphs 5-9; page 2, paragraphs 23-24	1-24,65-68

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Further documents are listed in the continuation of Box C.

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See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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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

"X"

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"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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Date of the actual completion of the international search

09 March 2006 (09.03.2006)

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