



# INTERNATIONAL SEARCH REPORT

Internat Application No  
PCT/L. 02/06073

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B1/30 H03D7/00 H03J5/02

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)

IPC 7 H04B H03L H03D H03J

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, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 31885 A (NOKIA MOBILE PHONES LTD ;KALTIOKALLIO KIM (FI); VAEISAENEN RISTO) 2 June 2000 (2000-06-02) page 2, line 6 -page 3, line 31 page 6, line 15 -page 11, last line; figures ---	1-5, 8, 10-13
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02, 29 February 2000 (2000-02-29) -& JP 11 331011 A (SHARP CORP), 30 November 1999 (1999-11-30) abstract; figures 2,4,6,8,10 --- -/--	1-13

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

☒ Patent family members are listed in annex.

° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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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

- \*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
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*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.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

13 June 2003

Date of mailing of the international search report

24/06/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Balbinot, H

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 530 929 A (LINDQVIST BJOERN ET AL) 25 June 1996 (1996-06-25) cited in the application column 1, line 8 - line 13 column 2, line 31 - line 39 column 3, line 33 -column 4, line 17; figure 2 ---	1-13
X	US 5 140 703 A (PAYNE CHRISTOPHER P) 18 August 1992 (1992-08-18) column 5, line 4 -column 6, line 43 column 8, line 59 -column 10, line 40 figures 1,2A -----	1-7,10

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International

Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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			AU 1562800 A 13-06-2000
			CN 1328723 T 26-12-2001
			EP 1133831 A1 19-09-2001
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US 5530929	A	25-06-1996	SE 502599 C2 20-11-1995
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