

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 June 2009 (04.06.2009)

PCT

(10) International Publication Number
WO 2009/070104 A1

(51) International Patent Classification:
H04M 1/02 (2006.01) *H04M 3/56* (2006.01)
H04M 1/60 (2006.01)

(74) Agent: ZACCO SWEDEN AB; P.O. Box 23101, Sveavägen 151, S-104 35 Stockholm (SE).

(21) International Application Number:
PCT/SE2008/051347

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:
25 November 2008 (25.11.2008)

(25) Filing Language: Swedish

(26) Publication Language: English

(30) Priority Data:
0702624-8 27 November 2007 (27.11.2007) SE

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): KONF-TEL AB [SE/SE]; Döbelnsgatan 19, S-903 30 Umeå (SE).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): KARLSSON, Torbjörn [SE/SE]; Sidsjövägen 49B, S-853 57 Sundsvall (SE). ARONSSON, Jonas [SE/SE]; Östra Strandgatan 46 D, S-903 33 Umeå (SE).

Published:
— with international search report



WO 2009/070104 A1

(54) Title: TELEPHONE INTENDED FOR CONFERENCE CALLS

(57) Abstract: This invention concerns a telephone intended for conference calls comprising various electrical control, regulatory and monitoring units, memory units, regulators for selecting functions and settings, an information screen on which menu systems coupled with functions and settings are displayed, and adjustment means that influence a cursor that can be displaced to and locked onto the desired selected heading in the menus and that activates the function or setting that is coupled to it. The telephone comprises a port that makes it possible to connect a headset to it.

TELEPHONE INTENDED FOR CONFERENCE CALLS

Technical area

5

This invention concerns a telephone intended for conference calls.

Background to the invention

10 Telephones for conference calls have long been commercially available and it has been possible to connect several telephones at the same time to these, in order to create a telephone conference group.

A currently available telephone for conference calls comprises different functions and settings and it comprises for this purpose different electrical control, regulation and monitoring units and systems, memory units, and similar units. The selection of functions and settings is done using different regulators, such as, for example, buttons, on the telephone. The buttons activate directly a function of the telephone or they give access to selection menus for different functions and settings in which it is possible to browse up and
15
20 down at various levels of the selection menus.

The telephone has a screen, suitably an LCD screen, on which the menu system is displayed. Adjustment means influence a cursor that can be displaced to and locked onto the desired selected heading in the menus and that activates the function or setting that is
25 coupled to it. The cursor is caused to stop on the desired heading in the selection menus and the selection is confirmed by, for example, the pressing of a button, such as the pressing of a button labelled with at least one of "OK" and "C". The displacement of the cursor normally takes place by pressing buttons labelled "Up" or "Down", or using other forms of direction and displacement symbolism.

30

Different settings can be made depending on whether the telephone is "on hook" or "off hook", whether the telephone is in a condition corresponding to having a handset in the cradle or not.

35 The selection menus are collected in a main menu that provides a clear entry into the various functions and settings. Some of these functions and settings are also available through one or several more or less direct buttons on the telephone.

Existing telephones are such that the microphone and loudspeakers are located in the telephone when it is in use and the users in the room are compelled to be located around the telephone not only in order to hear the parties that are included in a connected conference
5 call via the telephone but also in order to be able to be heard by these parties. It is not unusual that telephones of this type are used during meetings in which one person is responsible for some form of presentation, not completely unusual at, for example, a screen at a distance from the telephone. This means that this person, who is located at a distance
10 from the telephone and often moves freely around the room, is difficult for the parties who are connected to the telephone conference to hear, while it is also a problem for this mobile person to hear the parties that are taking part via the telephone.

Summary of the invention

15 One purpose of the invention is to offer a telephone intended for conference calls that makes it easier for a person to be located at a distance from the telephone.

This purpose is achieved with a telephone according to claim 1.

20 Description of the invention

The basis of the invention lies in being able to use a headset, earphones combined with a microphone, together with a telephone intended for conference calls. The headset is used by the person who desires to be able to move more freely relative to the telephone intended for
25 conference calls, and at a greater distance from the telephone.

In order to make this possible, the telephone is provided with an input/output, a port, an accessory port, to which it is possible to connect a headset and through this port to connect it to the telephone. The existing headset may be either stationary or mobile.

30

The functions of the headset, including those of loudspeaker and microphone, are connected to the other parties through the control and regulation systems of the telephone, and it becomes a party to the telephone conference.

35 When a headset has been connected to a telephone, the telephone must be configured such that the port, the connection, and the connected headset become an active part of the telephone, under the control, regulatory and monitoring units or systems of the telephone

and in the conference call. The configuration means that the headset is integrated into the telephone and its functions, becoming a part of the telephone. The telephone comprises a function that configures the telephone together with the headset.

- 5 A separate menu and submenus, headings, are available within the menu system of the telephone, with selections and settings for the particular port used, or for several ports that can be selected, and this makes possible the connection of a headset to the telephone providing selection opportunities for the particular headset that has been connected to the telephone through the port. All or parts of the setting up, the configuration, may also take
10 place automatically through the control, regulation and monitoring systems during the actual connection procedure.

The telephone comprises also a function that makes it possible to temporarily connect or disconnect either the loudspeaker or the microphone function, or both, from the main unit,
15 the telephone in the room, such that the person with the headset and one or several of the other connected parties can communicate with each other without persons in the room in which the telephone is located being able to hear or be heard. The person who uses the headset may be the same person who looks after the connection and it may be suitable that he or she have private conversations with one or several of the parties that have been
20 connected to the conference call during at least the connection procedures, but also possibly during other periods of the conference call.

25

30

Claims

- 5 1. A telephone intended for conference calls comprising various electrical control, regulation and monitoring units, memory units, regulators for selecting functions and settings, an information screen on which menu systems coupled with functions and settings are displayed, and adjustment means that influence a cursor that can be displaced to and locked onto the desired selected heading in the menus and that activates the function or setting that is coupled to it, c h a r a c t e r i s e d i n that
10 it comprises a port that makes it possible to connect a headset to the telephone.
2. The telephone according to claim 1, where the headset is stationary.
3. The telephone according to claim 1, where the headset is mobile.
- 15 4. The telephone according to any one of claims 1-3 comprising a function that configures the telephone together with the headset.
5. The telephone according to claim 4 where the configuration function comprises at
20 least one of selections and settings, which is also present in the menu system of the telephone.
6. The telephone according to claim 4 where the configuration function is integrated into the telephone in such a manner that it is activated and executed by the control,
25 regulatory and monitoring units of the telephone when the headset is connected to the telephone.
7. The telephone according to any one of claims 1-6, comprising a function that makes possible the connection and disconnection of the loudspeaker and/or microphone
30 functions of the telephone when a headset is connected to the telephone.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE2008/051347

A. CLASSIFICATION OF SUBJECT MATTER

IPC: see extra sheet

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: H04M

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

SE,DK,FI,NO classes as above

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

EPO-INTERNAL, WPI DATA, PAJ, TXTSP, TXTE, NPL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2007010288 A1 (SOUTHWING S L), 25 January 2007 (25.01.2007), page 15, line 10 - line 30, figures 1-3, abstract	1-6
Y	--	7
Y	WO 0045570 A1 (TELEFONAKTIEBOLAGET L M ERICSSON), 3 August 2000 (03.08.2000), page 4, line 21 - line 31; page 5, line 4 - line 15, abstract	7
A	DE 10008397 A1 (DEUTSCHE TELEKOM AG), 23 August 2001 (23.08.2001), the whole document	1-7

 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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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

25 February 2009

Date of mailing of the international search report

27 -02- 2009

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer

Sofia Sjögren /LR
Telephone No. +46 8 782 25 00

International patent classification (IPC)

H04M 1/02 (2006.01)

H04M 1/60 (2006.01)

H04M 3/56 (2006.01)

Download your patent documents at www.prv.se

The cited patent documents can be downloaded at www.prv.se by following the links:

- In English/Searches and advisory services/Cited documents (service in English) or
- e-tjänster/anförda dokument(service in Swedish).

Use the application number as username.

The password is **WNCDGJELow**.

Paper copies can be ordered at a cost of 50 SEK per copy from PRV InterPat (telephone number 08-782 28 85).

Cited literature, if any, will be enclosed in paper form.

INTERNATIONAL SEARCH REPORT
Information on patent family members

01/11/2008

International application No.
PCT/SE2008/051347

WO	2007010288	A1	25/01/2007	EP	1905221 A	02/04/2008
				ES	1060899 U,Y	01/12/2005
				GB	0519315 D	00/00/0000
				GB	0614550 D	00/00/0000
				GB	2430116 A	14/03/2007

WO	0045570	A1	03/08/2000	AU	2584400 A	18/08/2000
				AU	3284199 A	20/12/1999
				CN	1147107 C	21/04/2004
				CN	1345506 A,T	17/04/2002
				EP	1147646 A	24/10/2001
				HK	1045618 A	24/12/2004
				JP	2002536883 T	29/10/2002
				SE	525728 C	12/04/2005
				SE	9900290 A,L	28/07/2000
				TR	200102160 T	21/01/2002
				US	6549790 B	15/04/2003

DE	10008397	A1	23/08/2001	NONE		
----	----------	----	------------	------	--	--