PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau

WILL STATE OF THE STATE OF THE

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

H04M 1/72, 1/66, 1/274

(11) International Publication Number:

WO 99/13629

A1 (43) International Publication Date:

18 March 1999 (18.03.99)

(21) International Application Number:

PCT/GB98/02715

(22) International Filing Date:

9 September 1998 (09.09.98)

(30) Priority Data:

973637

9 September 1997 (09.09.97) FI

(71)(72) Applicants and Inventors: WESBY, Philip, Bernard [GB/FI]; Viinirinne 8A, FIN-02630 Espoo (FI). WESBY VAN SWAAY, Eveline [NL/FI]; Viinirinne 8A, FIN-02630 Espoo (FI). PARKKALI, Rauli [FI/FI]; Urheilukatu 18 B 28, FIN-00250 Helsinki (FI). AHNLUND, Hans, Kjell, Olof [SE/FI]; Apollogatan 10 A 36, F-00100 Helsinki (FI).

(74) Agent: ROBSON, Aidan, John; Reddie & Grose, 16 Theobalds Road, London WC1X 8PL (GB).

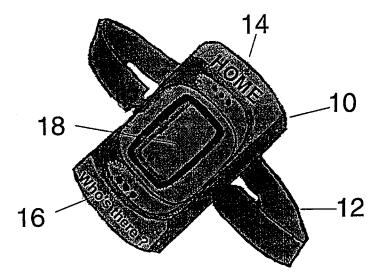
(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: EMERGENCY MOBILE RADIO TELEPHONE WITH REDUCE KEY SET



(57) Abstract

A mobile radio telephone or portable hot link communicator is described which provides a simple, efficient and effective means of communication to enable a child or elderly person to communicate with a known parent, relative or friend carrying a standard mobile telephone. The hot-link communicator is wrist worn, or hangs from a cord around the wearer's neck, and it comprises a preprogrammed Module that links it with preferably only one other mobile or fixed telephone. The hot link communicator comprises the very basic functionality, and in some embodiments, no display, only a preprogrammed dialling button and an answer button. The hot link communicator makes possible communication between parents needing to communicate with their children and between supervising adults and elderly persons needing assistance in that the children and elderly persons do not need to input numbers in sequence via a key pad or search for a telephone in the rain and dark.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	$\mathbf{U}\mathbf{Z}$	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	$\mathbf{z}\mathbf{w}$	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		



WU 99/13629 PC1/GB98/027/

EMERGENCY MOBILE RADIO TELEPHONE WITH REDUCE KEY SET

DESCRIPTION

BACKGROUND OF THE INVENTION

5

10

15

20

25

30

weather.

The invention relates to a portable communicating apparatus. More particularly, it relates to a portable communicating hot link apparatus which can provide a simple, efficient and effective means of communication between children and their parents, between elderly persons and caring relatives, and between mentally lessable individuals and supervising adults.

Children often disappear from view from parents causing anxiety and worry until their whereabouts is known again. Mobile telephone technology, such as GSM, DCS, and CDMA can provide an essential link between older children and their parents, but this is not the answer for younger children, elderly persons, or mentally less-able individuals. The mobile telephone is very valuable and might easily be lost or stolen from a child or from a mentally less-able individual.

Similarly, elderly citizens may experience distress should they become lost in a crowd or lose sight of a supervising adult. In all these instances, children, mentally less able individuals, and elderly persons would quite likely experience difficulty in pressing the

Elderly persons often make appointments to meet supervising adults, such as their grown up children, but due to the fast commotion of life, they may miss the particular agreed meeting point or they may forget the time of the meeting. There is clearly a need for a communicating device which can address the communication technology requirements of this situation.

right sequence of keys on the mobile telephone,

particularly if it were dark or in instances of bad



WU 99/13629 PC1/GB98/02/15

- 2 -

Current mobile phone technology products do not offer a very simple and cheap technology solution which addresses this essential one-to-one communication need.

In addition to these specific communication problem needs, there is a growing concern about the potentially harmful effect of electromagnetic radiation upon the developing brains of young children. Within this context, there is an opportunity to design a communication device for children which positions the radiating electromagnetic field of a communication device away from the close proximity of the brain. In this regard, parents who maintain the belief that mobile telephones present a health risk due to the radiating antenna, may rest secure in the knowledge that this risk can be significantly reduced.

Further to these limitations of existing technologies, and so far as is known, no portable communication apparatus is presently available which serves to offer a hot link communicator comprising the minimum mobile telephone functionality suited to the specific needs of this problem area.

OBJECTS OF THE INVENTION

Accordingly, it is an object of the present invention to provide a novel portable hot link communicating apparatus to meet the minimum specific requirements of parents wishing to have the facility of immediate communication with their children, between mentally less-able individuals and supervising adults, and between elderly persons and caring relatives.

It is a further object of the present invention to provide a novel portable hot link communicating apparatus which comprises a preprogrammed identity module comprising the number of the mobile or fixed telephone to which the hot link communicating device is linked.



5

10

15

20

25

30

35

WO 99/13629 PC1/GB98/02/15-

- 3 -

It is a further object of the present invention to provide a novel portable hot link communicating apparatus which may comprise no key pad at all, other than a simple array of press pads to initiate a call or to answer an incoming call thereby minimising cost and functionality of the said communication apparatus.

It is a further object of the present invention, to provide a novel portable hot link communicating apparatus which may comprise no display thereby minimising cost and functionality of the said communication apparatus.

It is a further object of the present invention, to provide a novel portable hot link communicating apparatus which comprises a simple and effective way of attaching it to the wearer such as a wrist strap, a hip belt clip, or a neck cord. In this context, it is a further object of the invention to provide a portable hot link communicating apparatus which may function effectively while worn on the wrist such that the electromagnetic field of the radiating antenna is positioned away from the close proximity of the developing brains of young children while a call is in progress.

It is a further object of the present invention, to provide a novel portable hot link communicating apparatus which may be moulded in any of a number of bright colours and designs which are attractive to young children and which are therefore readily worn by said children.

It is a further object of the present invention, to provide a novel portable hot link communicating apparatus which makes use of state of the art battery technology such that the hot link communicating device may be powered by a light-weight, low volume rechargeable battery with sufficient power to remain active for 24 hours.



5

10

15

20

25

30

35

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

